

Memory Card Systems

CF Card—CompactFlash

Type I and Type II Headers and Ejectors	M-3 to M-11
Type I Headers	M-12 to M-14
Ejectors	M-15 to M-17
Card Kit	M-18
Receptacles	M-19 to M-20
CF Card to PC Card Adapter	M-21
CF Header	M-22

PC Card

Headers	M-24 to M-26
Header and Ejector Assemblies	M-27 to M-28
Cardbus One Slot Headers	M-29 to M-30
Ejectors	M-31 to M-32
Header and Ejector Assemblies	M-33 to M-34
Two Slot Header	M-35
Ejector Assembly	M-36
Header and Ejector Assembly	M-37
Type II Card Kit	M-38
Receptacles	M-39 to M-40

MultiMediaCard Connectors M-41 to M-42

Smart Card/SIM Card Reader Connectors M-43 to M-45

Application Tooling M-46 to M-47



For more information, please see the last page of the catalog for the location nearest you or contact:

With portable devices getting smaller and memory demands increasing, there is a growing need for compact packaging of removable storage devices. Molex has responded to this need with a full range of CompactFlash (CF) connectors. From host system headers and ejectors to card kit packaging and CF-to-PC card adapter, Molex offers the complete CompactFlash solution.

Our growing line of CompactFlash connectors were developed based on extensive design and manufacturing experience of a broad range of PC card connectors. As a licensee of the CompactFlash trademark and active member of the CompactFlash Association, Molex is a recognized leader in the design and production of CF Card connectors.

Molex offers both Type I and Type II CF Card connectors to meet the growing market needs for both types of systems. Molex has also addressed the needs of the emerging communications cards by providing integral frame grounding on most of our extensive lines of Type II host system connectors.

Molex's CF connector range includes a variety of options and features, including:

- Various PCB standoff heights
- 0.635mm (.025") Single inline PCB solder tails
- Modular ejector systems
- Various button styles from straight, flip style or push-push options
- Straddle mount or inline surface mount receptacles for CF cards

Applications:

- Digital Still Camera
- Palmtop PC/Organizer
- Digital Music Player
- Embedded Systems
- Any Portable/Handheld Device

Introduction

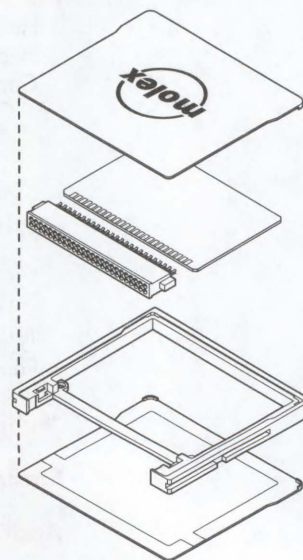
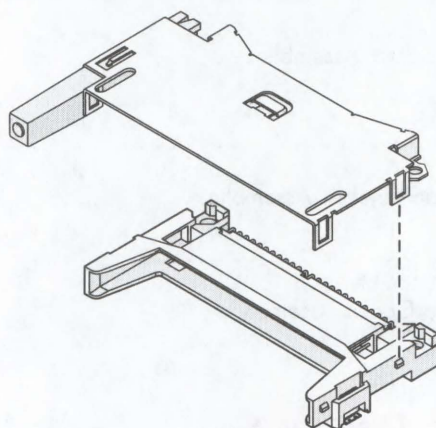
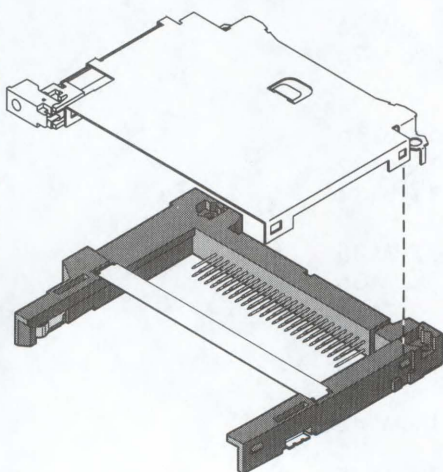
Molex CF connectors meet the CompactFlash specifications:

Current: 0.5A
Voltage: 100V
Durability: 10,000 cycles
Operating Temperature: -20 to +90°C

CONNECTOR SYSTEM OVERVIEW

Memory Card Systems

M



FEATURES AND SPECIFICATIONS

Features and Benefits

- Size 50 circuits
- Low-profile 5.85mm high design
- Dual-row 1.27mm (.050") pitch at card interface and 0.635mm (.025") pitch in-line SMT tails
- Integral Gold-plated frame grounds and solder tabs
- High temperature housing suitable for reflow soldering
- In-line SMT tails protect against damage during assembly

Reference Information

Packaging: Tray
Use With: 55246 ejector
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N min.
Mating Force: 28.8N max.
Unmating Force: 4.9N min.
Durability: 10,000 cycles

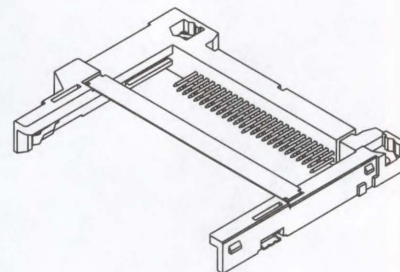
Physical

Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Contact Area—Gold over Palladium Nickel
Solder Tail Area—Tin/Lead
Underplating—Nickel
Solder Tab: Phosphor Bronze, Tin/Lead over Copper plating
Operating Temperature: -20 to +90°C

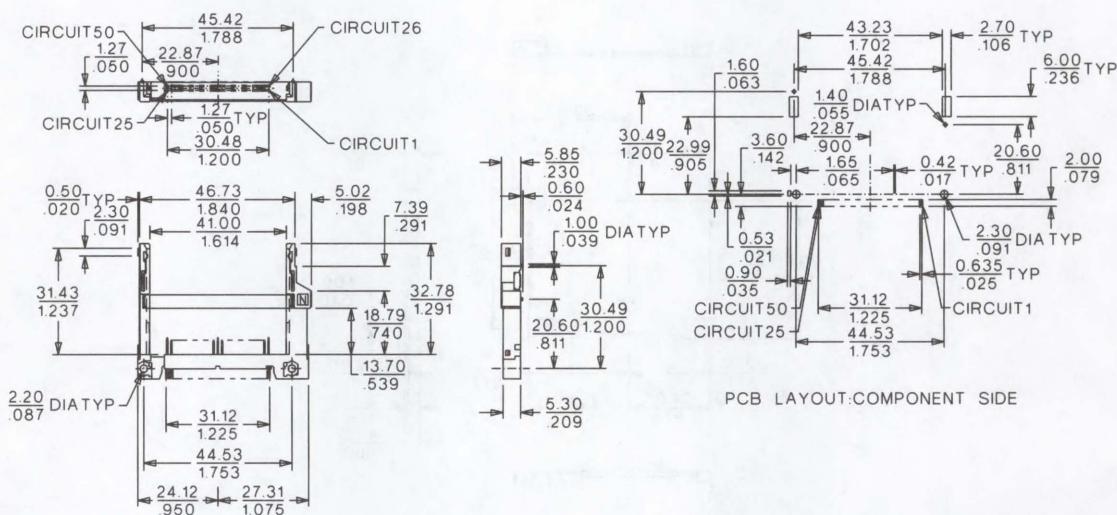
molex® 1.27mm (.050") Pitch
CF Card Header

55244

**Right Angle, SMT
Top Mounting
For Type I and Type II Cards**



CATALOG DRAWING (FOR REFERENCE ONLY)



FEATURES AND SPECIFICATIONS

Features and Benefits

- Uniquely short flip-style button folds 90 degrees for maximum space savings
- Low-profile modular design snaps easily onto header
- Stainless Steel material provides durability and protection
- Lever design provides for smooth card extraction

Reference Information

Packaging: Tray

Use With: 55244

Designed In: Millimeters

Physical

Metal Shell: Stainless Steel

Rod: Stainless Steel

Lever: Stainless Steel

Top Button: Glass-filled PBT, UL 94V-0

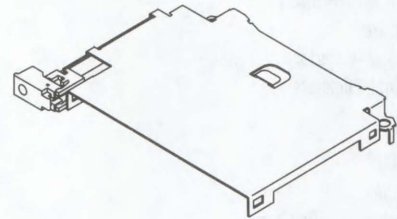
Base Button: Black polycarbonate, UL 94V-0

Pin: Brass

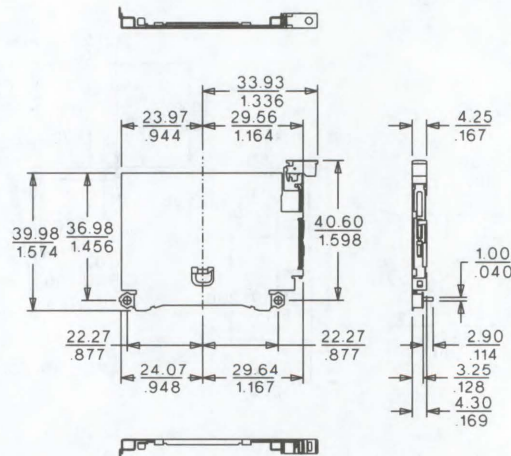
molex® 1.27mm (.050") Pitch
CF Card Ejector

55246

**Left Side Flip Button
For Type I and Type II Header**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	
Black Top Button	Gray Top Button
55246-0011	55246-0015

molex® 1.27mm (.050") Pitch
CF Card Header

Features and Benefits

- Size 50 circuits
- Short overall width for space savings
- Dual-row 1.27mm (.050") pitch at card interface and 0.635mm (.025") pitch in-line SMT tails
- Integral one-piece frame ground and solder tab
- Front and rear solder tabs for secure PCB retention
- 1.65mm (.065") stand-off

Reference Information

Product specification: Contact Molex
Packaging: Tray
Use With: 55356 and 55364 ejectors
Designed In: Millimeters

Electrical

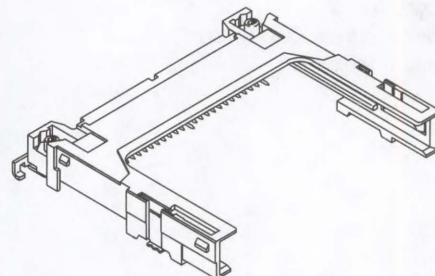
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Mechanical

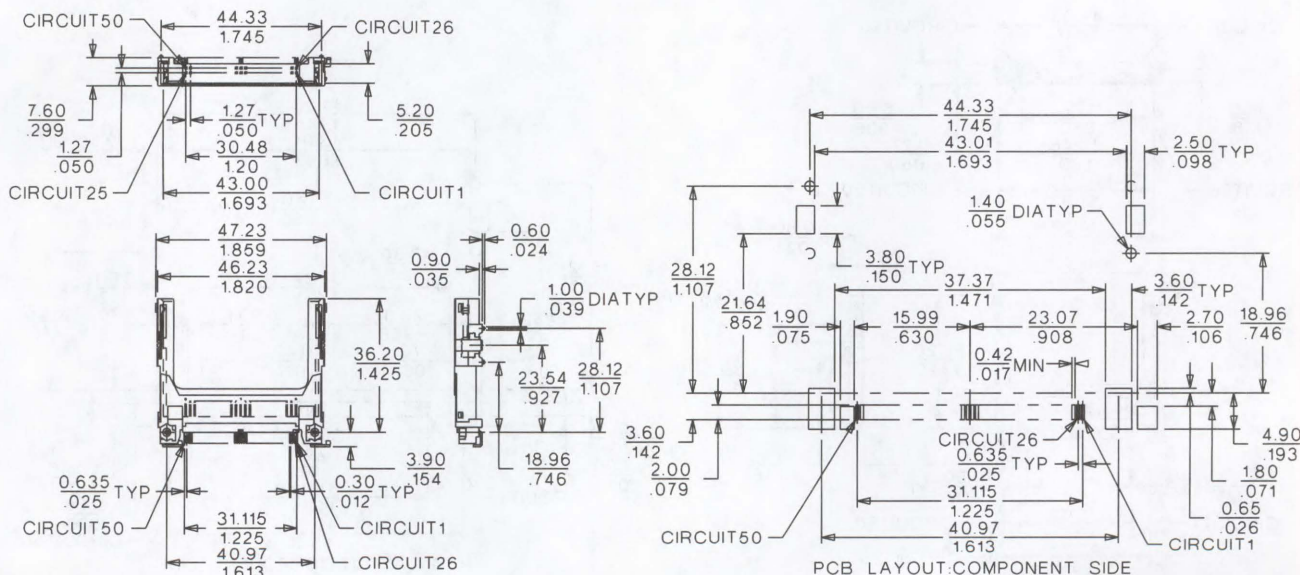
Contact Retention to Housing: 9.8N min.
 Mating Force: 28.8 N max.
 Unmating Force: 4.9N min.
 Durability: 10,000 cycles

Physical

Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Contact Area—Gold over Palladium Nickel
Solder Tail Area—Tin/Lead
Underplating—Nickel
Front Solder Tab/Frame Ground: Phosphor Bronze,
Gold plating in contact area,
Tin/Lead plating in solder tail area,
Nickel underplating overall
Rear Solder Tabs: Phosphor Bronze, Tin/Lead plating
over Copper
Operating Temperature: -20 to +90°C



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
55358-5021

FEATURES AND SPECIFICATIONS

Features and Benefits

- Size 50 circuits
- Short overall width for space savings
- Dual-row 1.27mm (.050") pitch at card interface and 0.635mm (.025") pitch in-line SMT tails
- Integral one-piece frame ground and solder tab
- Front and rear solder tabs for secure PCB retention
- High temperature housing suitable for reflow soldering

Reference Information

Product specification: Contact Molex
Packaging: Tray
Use With: 55356 and 55365 ejectors
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

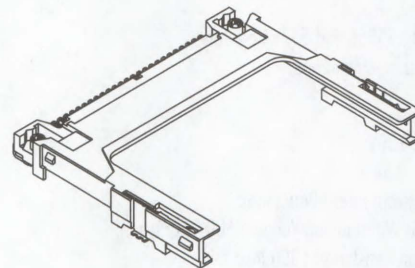
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Contact Area—Gold over Palladium Nickel
Solder Tail Area—Tin/Lead
Underplating: Nickel
Front Solder Tab/Frame Ground: Phosphor Bronze, Gold plating in contact area, Tin/Lead plating in solder tail area, Nickel underplating overall
Rear Solder Tabs: Phosphor Bronze, Tin/Lead plating over Copper
Operating Temperature: -20 to +90°C



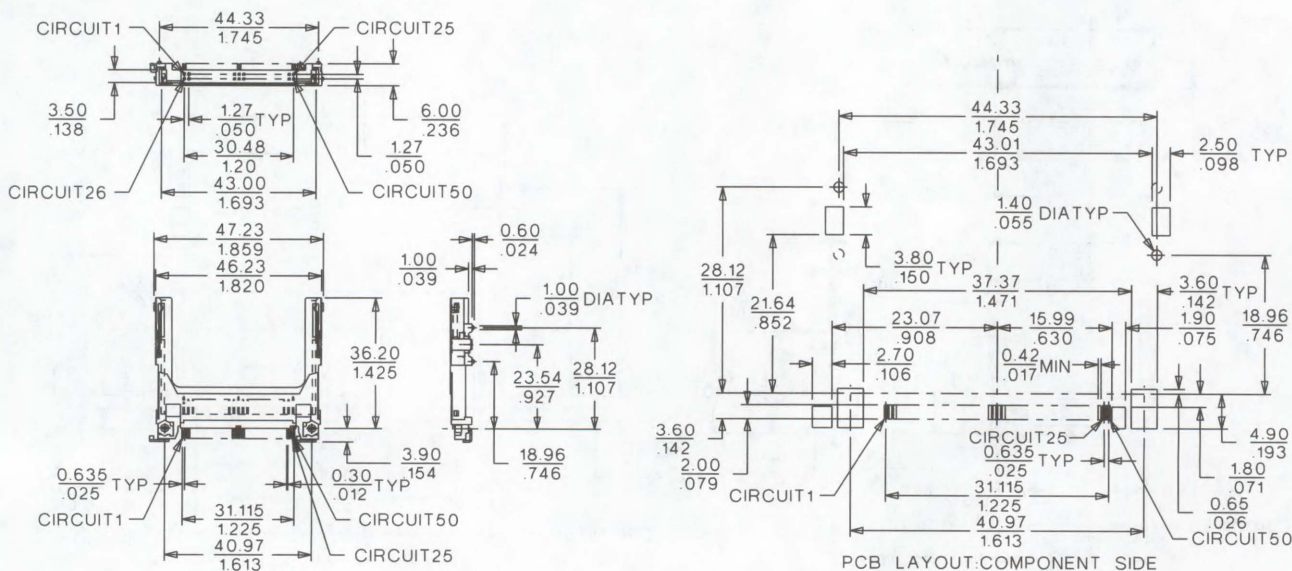
1.27mm (.050") Pitch CF Card Header

55359

Right Angle, SMT Bottom Mounting For Type I and II Cards



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
55359-5021

FEATURES AND SPECIFICATIONS

Features and Benefits

- Modular design snaps easily onto header
- Low-profile design
- Can be used with both top and bottom mount headers
- Lever design provides for smooth card extraction

Reference Information

Product Specification: PS-55546-003

Packaging: Tray

Mates With: 55358 and 55359

Designed In: Millimeters

Physical

Metal Shell: Stainless Steel

Rod: Stainless Steel

Lever: Stainless Steel

Button: Black glass-filled PBT, UL 94V-0

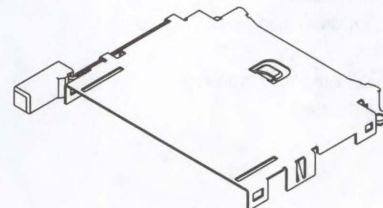
Operating Temperature: -20 to +90°C



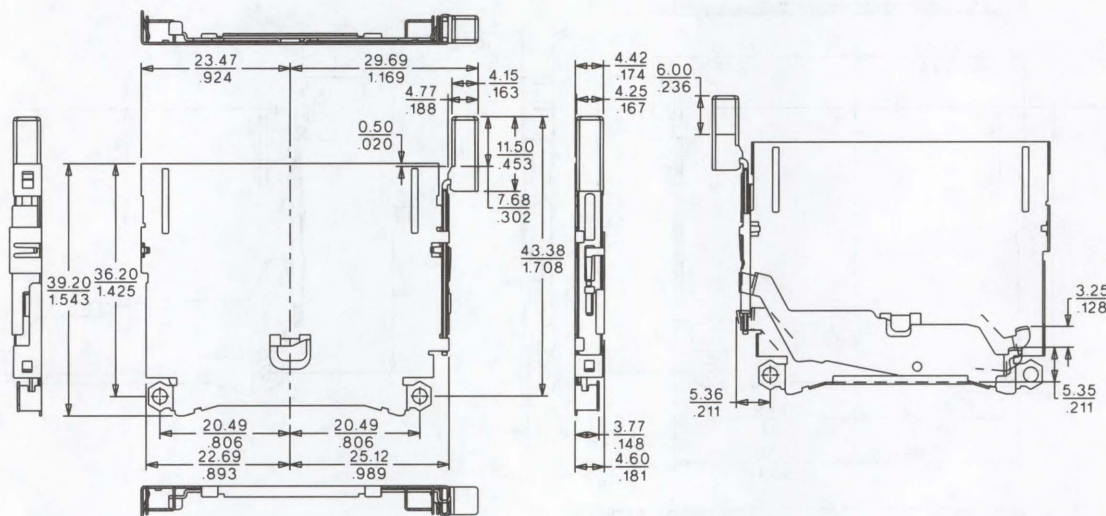
**1.27mm (.050") Pitch
CF Card Ejector**

55546

Left Side Button



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Order No.
55546-0011

FEATURES AND SPECIFICATIONS

Features and Benefits

- Short flip-style button folds 90 degrees for maximum space savings
- Low-profile modular design snaps easily onto header
- Stainless Steel material provides durability and protection
- Lever design enables smooth card extraction

Reference Information

Product specification: Contact Molex
Packaging: Tray
Use With: 55358 and 55359 headers
Designed In: Millimeters

Physical

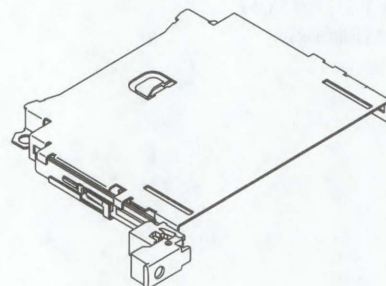
Metal Shell: Stainless Steel
Rod: Stainless Steel
Lever: Stainless Steel
Flip Button: Glass-filled PBT, UL 94V-0
Base Button: Black Polycarbonate, UL 94V-0
Button Pin: Brass



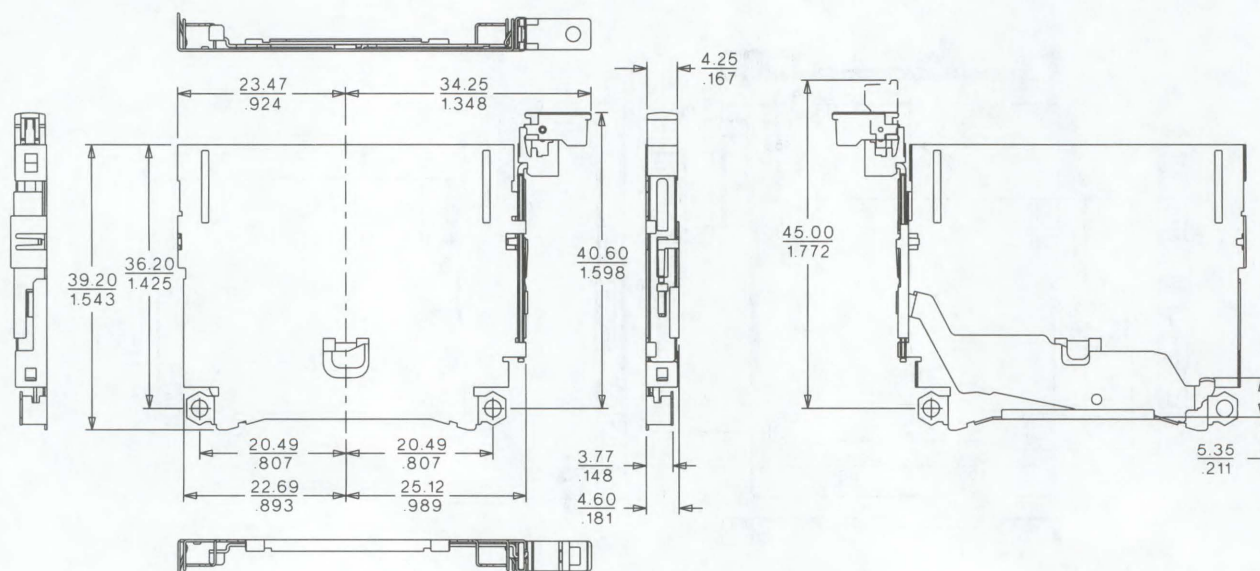
**1.27mm (.050") Pitch
CF Card Ejector**

55356

**Left Side Flip Button
For Type I and II Headers**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
55356-0011

FEATURES AND SPECIFICATIONS

Features and Benefits

- Double action push-style button offers space savings and easy eject
- Modular design snaps easily onto header
- Low-profile design
- Lever design provides for smooth card extraction

Reference Information

Product specification: Contact Molex

Packaging: Tray

Use With: 55358 header

Designed In: Millimeters

Physical

Metal Shell: Stainless Steel

Push Rod: Stainless Steel

Lever: Stainless Steel

Side Plate: Stainless Steel

Side Cover: Stainless Steel

Pin Plate: Steel

Slider: Black Polycarbonate, UL 94V-0

Heat Cam: Black Polycarbonate, UL 94V-0

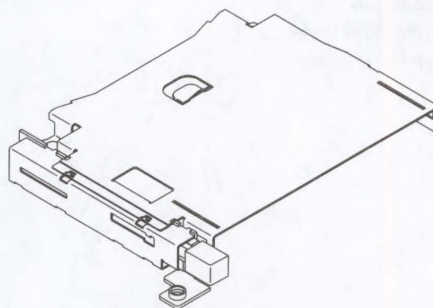
Coil Spring: Stainless Steel



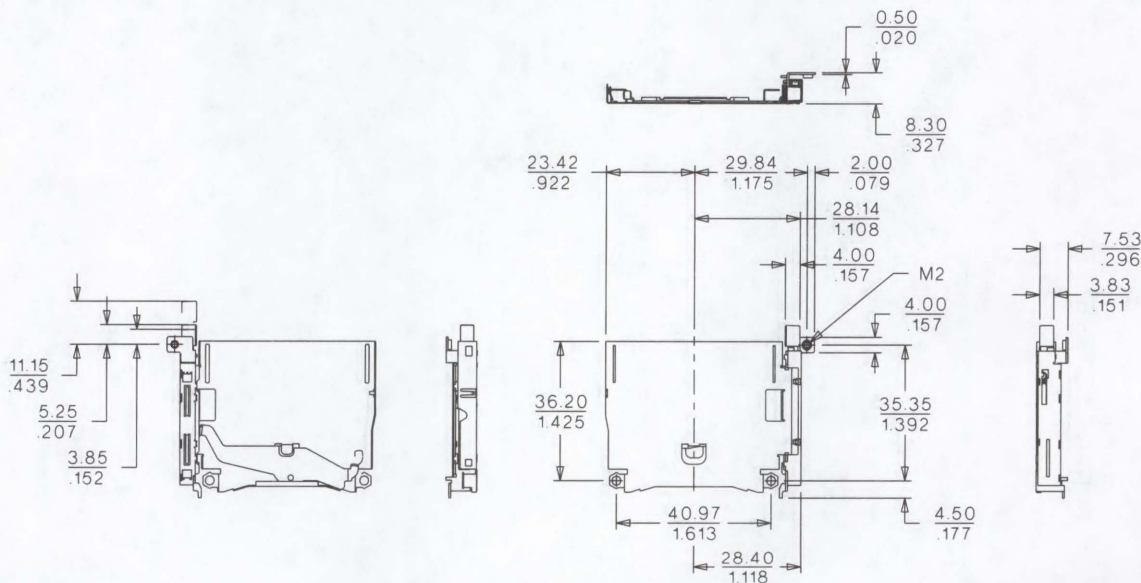
**1.27mm (.050") Pitch
CF Card Ejector**

55364

**Left Side Button
Push-Push Type**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
55364-0011

Memory Card Systems

M

FEATURES AND SPECIFICATIONS

Features and Benefits

- Double action push-style button offers space savings and easy eject
- Modular design snaps easily onto header
- Low-profile design
- Lever design provides for smooth card extraction

Reference Information

Product specification: Contact Molex
Packaging: Tray
Use With: 55359 header
Designed In: Millimeters

Physical

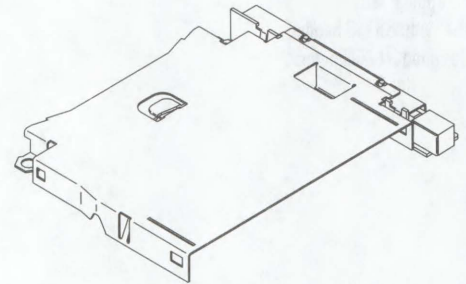
Metal Shell: Stainless Steel
Push Rod: Stainless Steel
Lever: Stainless Steel
Side Plate: Stainless Steel
Side Cover: Stainless Steel
Pin Plate: Steel
Slider: Black Polycarbonate, UL 94V-0
Heat Cam: Black Polycarbonate, UL 94V-0
Coil Spring: Stainless Steel



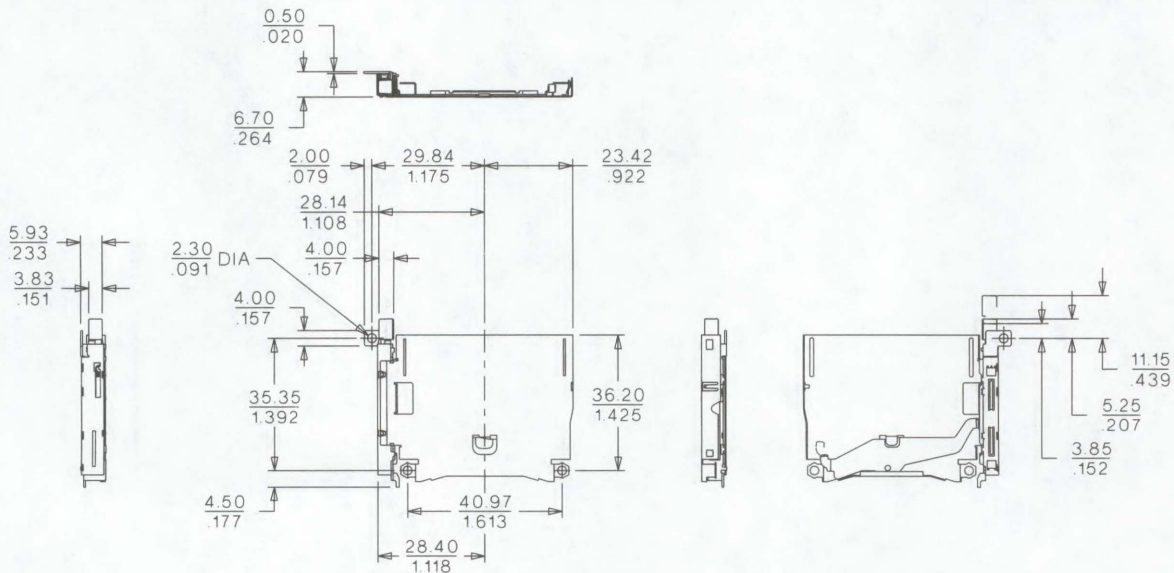
**1.27mm (.050") Pitch
CF Card Ejector**

55365

**Right Side Button
Push-Push Type**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
55365-0011

*Note: 55365 can only be used with 55359, which is a bottom-mount header.
In this application, the button will be on the left side.

FEATURES AND SPECIFICATIONS

Features and Benefits

- Low profile: 4.30mm (.169") height
- Single inline surface mount tails: 0.635mm (.025") pitch
- Long guide rail for longer lead in to the mating interface
- Polarization key prevents CF Card mis-insertion
- Dual row 1.27mm (.050") pitch at card interface
- Solder pads near connector front prevent rocking of assembly during mating and unmating

Reference Information

Product Specification: PS-67155

Packaging: Tray

Mates With: 67003, 67114 or industry standard interface

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 40mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N min.

Mating Force: 28.8N max.

Unmating Force: 4.9N min.

Durability: 10,000 cycles

Physical

Housing: White Glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

Plating: Contact Area—Gold over Palladium Nickel

Solder Tail Area—Tin/Lead

Solder Tab Area—Brass, Tin/Lead over Copper plating

Underplating—Nickel

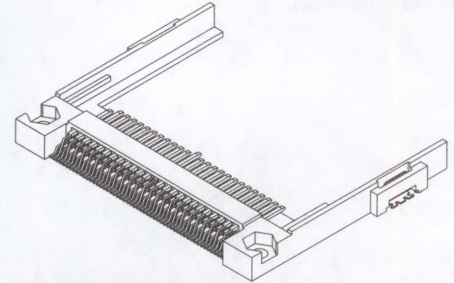
Operating Temperature: -20 to +90°C



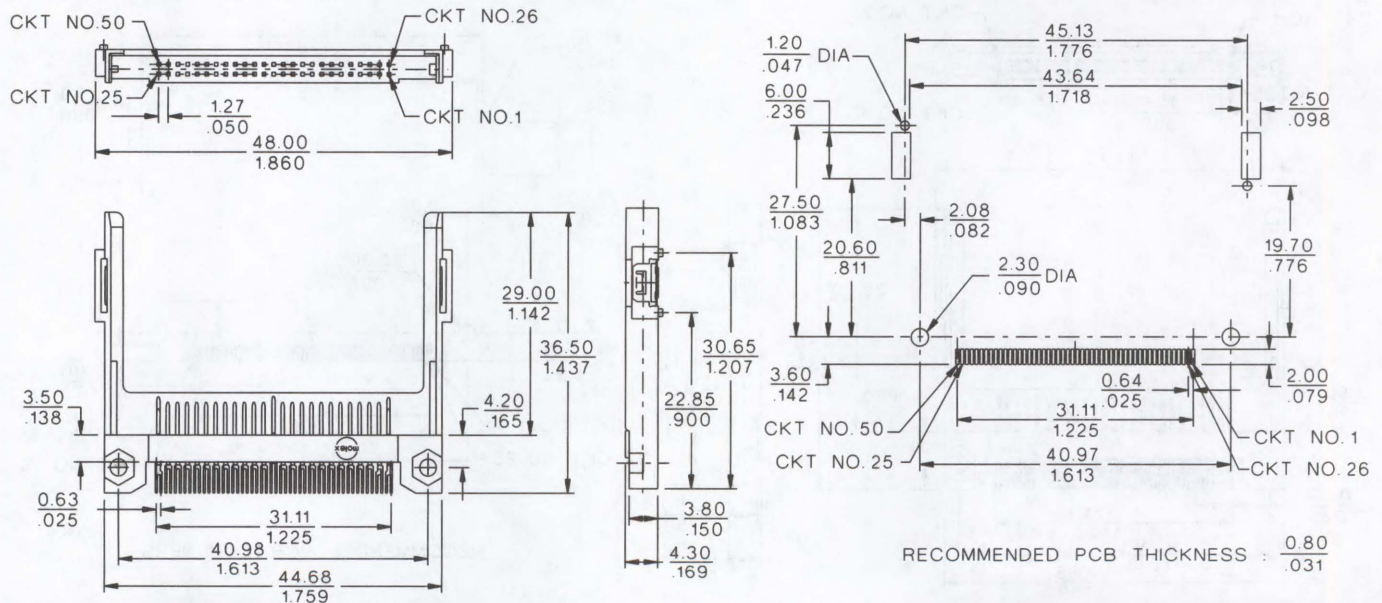
1.27mm (.050") Pitch CF Card Header

67155

**Low Profile, Right Angle,
SMT
Top Mount
For Type I and Type II Cards**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
50	67155-0002

FEATURES AND SPECIFICATIONS

Features and Benefits

- Low profile: 4.30mm (.169") height
- Single inline surface mount tails: 0.635mm (.025") pitch
- Long guide rail for longer lead in to the mating interface
- Polarization key prevents CF Card mis-insertion
- Dual row 1.27mm (.050") pitch at card interface
- Solder pads near connector front prevent rocking of assembly during mating and unmating

Reference Information

Product Specification: PS-67155

Packaging: Tray

Mates With: 67003, 67114 or industry standard interface

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 40mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N min.

Mating Force: 28.8N max.

Unmating Force: 4.9N min.

Durability: 10,000 cycles

Physical

Housing: White Glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

Plating: Contact Area—Gold Palladium Nickel

Solder Tail Area—Tin/Lead

Solder Tab Area—Brass, Tin/Lead over Copper plating

Underplating—Nickel

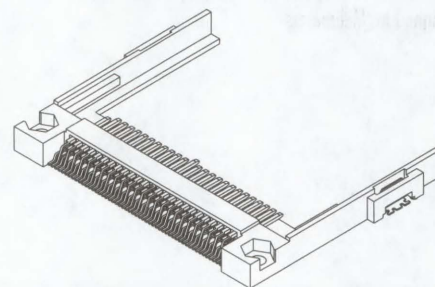
Operating Temperature: -20 to +90°C



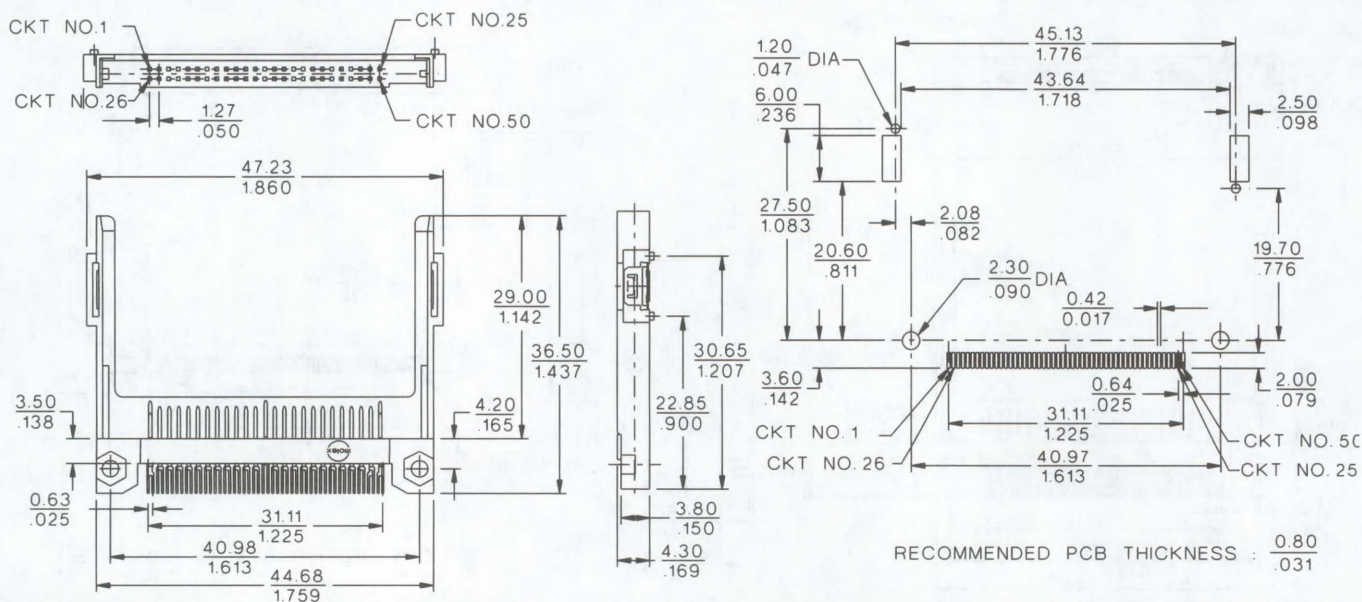
1.27mm (.050") Pitch CF Card Header

67155

**Low Profile, Right Angle,
SMT
Bottom Mount
For Type I Card**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
50	67155-0001

FEATURES AND SPECIFICATIONS

Features and Benefits

- Size 50 circuits
- 1.64mm standoff height
- Dual-row 1.27mm (.050") pitch at card interface and 0.635mm (.025") pitch in-line SMT tails
- High temperature housing suitable for reflow soldering
- Solder tabs in front to provide stability during mating
- In-line SMT tails protect against damage during assembly

Reference Information

Packaging: Embossed tape and reel or tray
Use With: 55021, 55022 and 55065 ejectors
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N min.
Mating Force: 28.8N max.
Unmating Force: 4.9N min.
Durability: 10,000 cycles

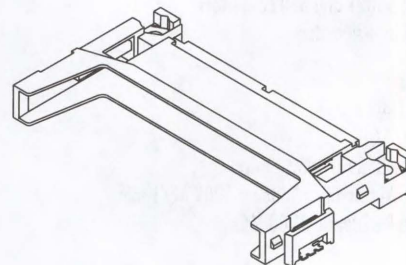
Physical

Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Contact Area—Gold over Palladium Nickel
Solder Tail Area—Tin/Lead
Underplating—Nickel
Solder Tab: Phosphor Bronze, Tin/Lead over Copper plating
Operating Temperature: -20 to +90°C

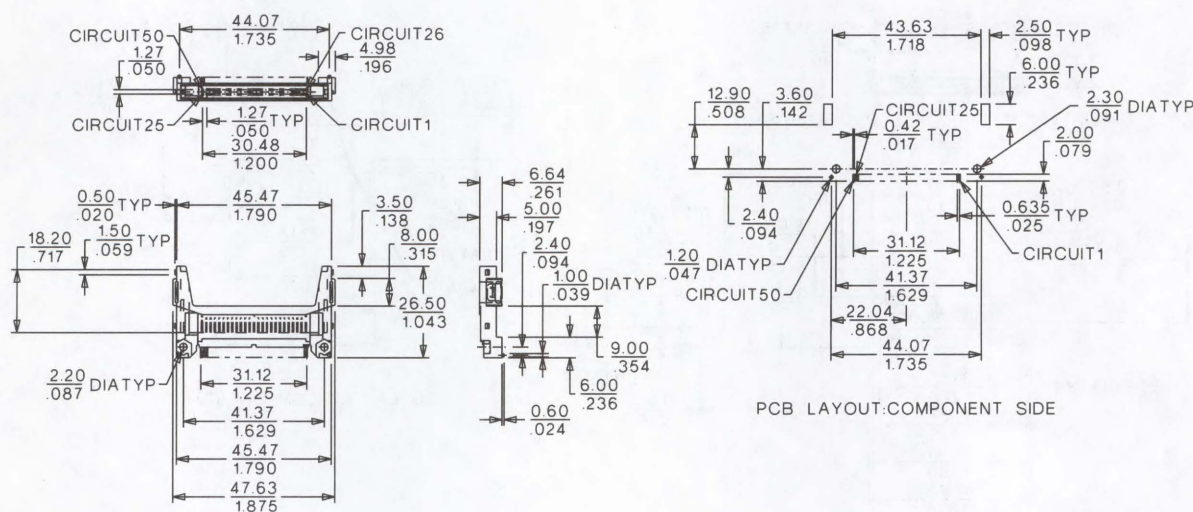
molex® 1.27mm (.050") Pitch
CF Card Header

53856

**Right Angle, SMT
Top Mounting
For Type I Cards**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	
Tray	Embossed Tape and Reel
53856-5010	53856-5018

FEATURES AND SPECIFICATIONS

Features and Benefits

- Size 50 circuits
- 1.64mm standoff height
- Dual-row 1.27mm (.050") pitch at card interface and 0.635mm (.025") pitch in-line SMT tails
- High temperature housing suitable for reflow soldering
- Solder tabs in front to provide stability during mating
- In-line SMT tails protect against damage during assembly

Reference Information

Packaging: Embossed tape and reel or tray
Use With: 55021 and 55022 ejectors
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: 40m Ω max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 M Ω min.

Mechanical

Contact Retention to Housing: 9.8N min.
 Mating Force: 28.8N max.
 Unmating Force: 4.9N min.
 Durability: 10,000 cycles

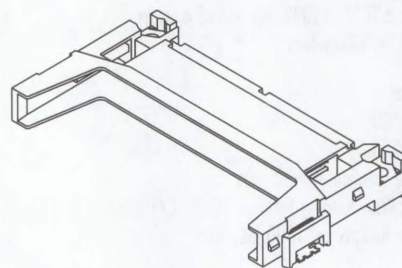
Physical

Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Contact Area—Gold over Palladium Nickel
Solder Tail Area—Tin/Lead
Underplating—Nickel
Solder Tab: Phosphor Bronze, Tin/Lead over Copper plating
Operating Temperature: -20 to +90°C

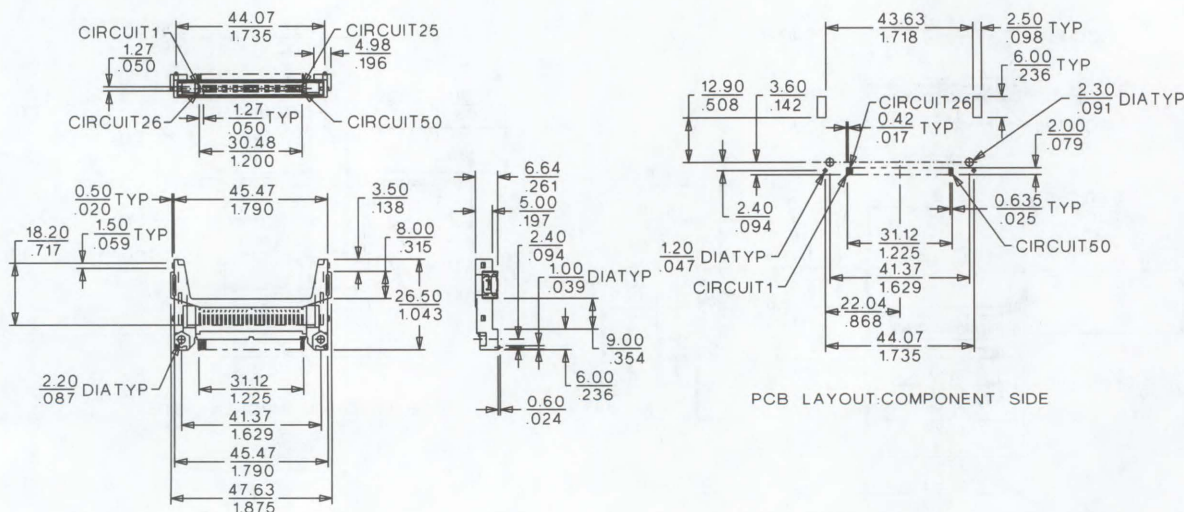


53927

Right Angle, SMT Bottom Mounting For Type I Cards



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	
Tray	Embossed Tape and Reel
53927-5010	53927-5018

FEATURES AND SPECIFICATIONS

Features and Benefits

- Modular design snaps easily onto header
- Low-profile design
- Can be used with both top and bottom mount headers
- Lever design provides for smooth card extraction

Reference Information

Packaging: Tray

Use With: 53856 and 53927

Designed In: Millimeters

Physical

Metal Shell: Stainless Steel

Button: Black glass-filled PBT, UL 94V-0

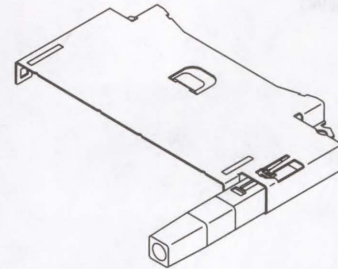
Lever: Stainless Steel



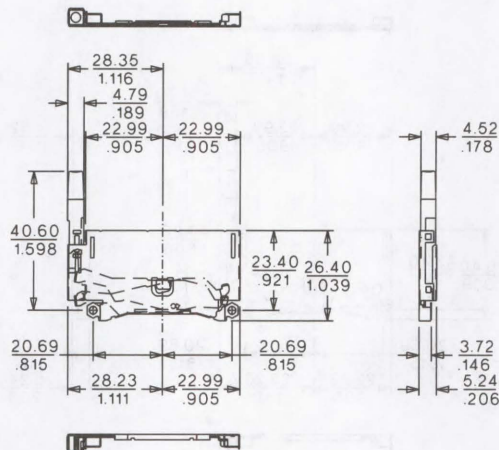
1.27mm (.050") Pitch
CF Card Ejector

55021

Right Side Button
For Type I Header



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
55021-0001

FEATURES AND SPECIFICATIONS

Features and Benefits

- Modular design snaps easily onto header
- Low-profile design
- Can be used with both top and bottom mount headers
- Lever design provides for smooth card extraction

Reference Information

Packaging: Tray
 Use With: 53856 and 53927
 Designed In: Millimeters

Physical

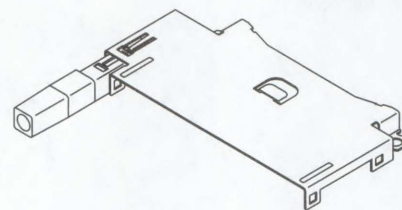
Metal Shell: Stainless Steel
 Button: Black glass-filled PBT, UL 94V-0
 Lever: Stainless Steel



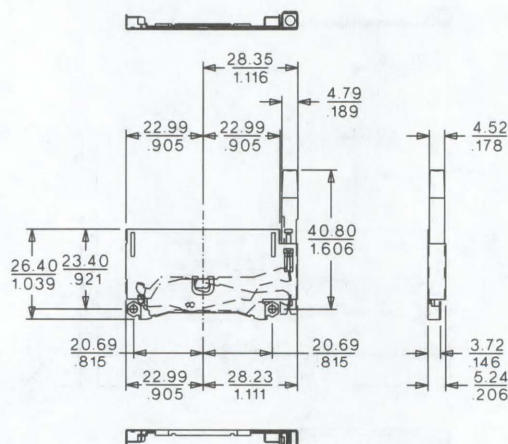
**1.27mm (.050") Pitch
 CF Card Ejector**

55022

**Left Side Button
 For Type I Header**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
55022-0001

FEATURES AND SPECIFICATIONS

Features and Benefits

- Flip button folds 90 degrees for space savings
- Low-profile modular design snaps easily onto header
- Can be used with both top and bottom mount headers
- Lever design provides for smooth card extraction

Reference Information

Packaging: Tray

Use With: 53856 and 53927

Designed In: Millimeters

Physical

Metal Shell: Stainless Steel

Base Rod: Gray polycarbonate, UL 94V-0

Lever: Stainless Steel

Top Button: Gray glass-filled PBT, UL 94V-0

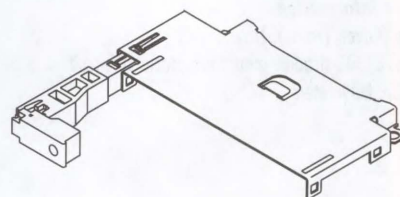
Pin: Brass



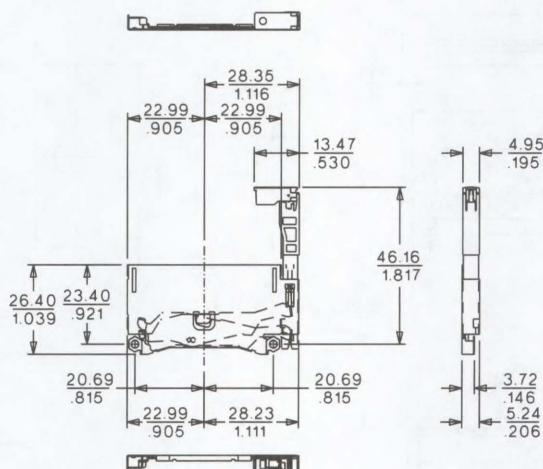
1.27mm (.050") Pitch
CF Card Ejector

55065

Left Side Flip Button
For Type I Header



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
55065-0005

FEATURES AND SPECIFICATIONS

Features and Benefits

- Compatible with CompactFlash Association Standard (CFA)
- Offers complete component kit for assembly
- 2 pieces framed Cover Kit
- Cover with adhesive tapes pre-assembled
- Semi automatic application tooling 67083/67084

Reference Information

Packaging (Cover/Frame): Tray

Used With: 67003 straddle mount receptacle 50 circuit

Designed In: Millimeters

Physical

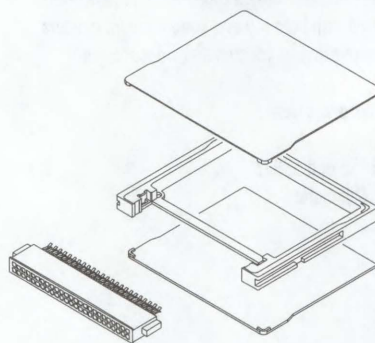
Frame: Black PBT, UL 94V-0

Plating: Gold over Nickel

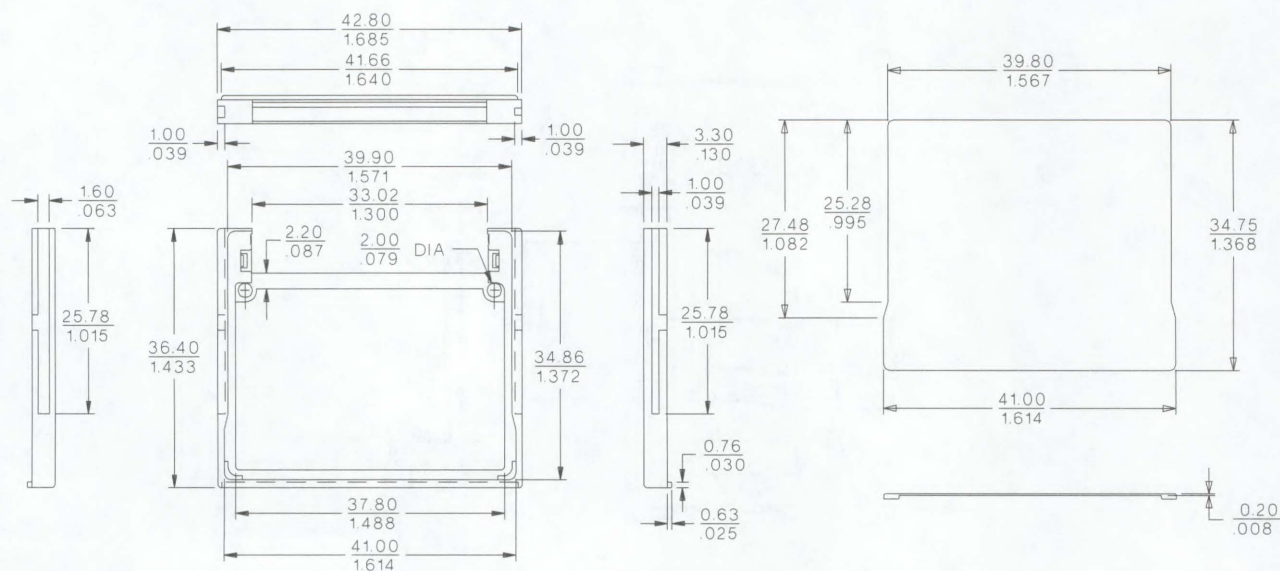
Cover: Stainless Steel

Adhesive Tape: 3M 615 heat adhesive

molex® CF Card Kit Type I



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Item
67045-0001	Card Kit Frame
67046-0000	Card Kit Cover (1 piece) without grounding
67046-0001	Card Kit Cover (1 piece) with grounding
67003-000X	50 Circuit Receptacle without grounding
67003-0003	50 Circuit Receptacle with grounding

FEATURES AND SPECIFICATIONS

Features and Benefits

- Size 50 circuits
- Compatible with Compact Flash Association Standard (CFA)
- Dual beam contact design
- Various offset tails
- Low insertion/withdraw force

Reference Information

Product Specification: PS-67998-0006

Packaging: Tube

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 40mΩ max.

Dielectric Withstanding Voltage: 750V AC /1 min.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention To Housing: 4.9N min.

Mating Force: 28.8N max.

Unmating Force: 4.9N min.

Durability: 10,000 cycles

Physical

Housing: Black glass-filled LCP, UL 94V-0

Contact: Beryllium Copper Alloy

Plating: Contact Area—Gold over Palladium Nickel

Solder Tail Area—Tin/Lead

Underplating—Nickel

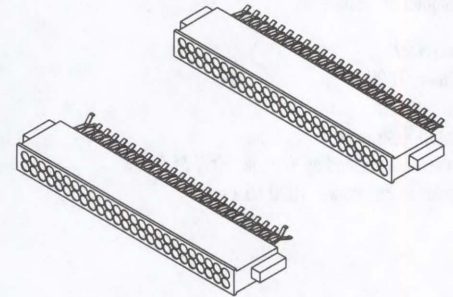
Operating Temperature: -20 to +90°C



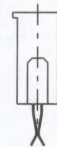
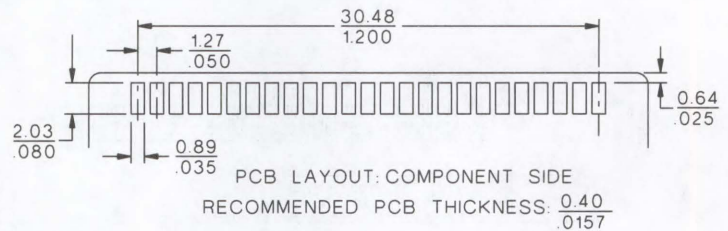
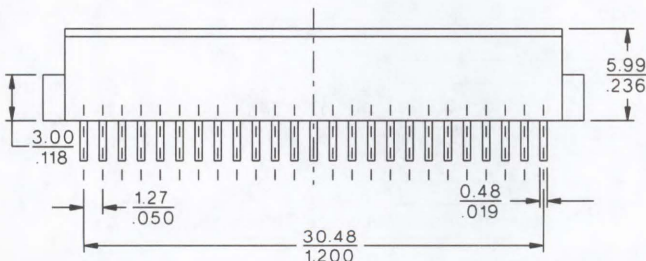
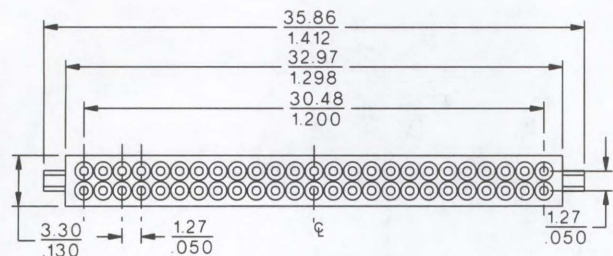
1.27mm (.050") Pitch CF Card Receptacle

67003

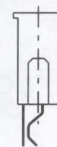
Straddle Mount Standard and Offset Tail Versions



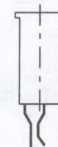
CATALOG DRAWING (FOR REFERENCE ONLY)



SYMMETRIC TYPE
67003-0000



OFFSET TYPE
67003-0001 67003-0006



SYMMETRIC TYPE
(WITH GROUNDING)
67003-0003
67003-0007

ORDERING INFORMATION

Circuits	Order No.	Offset Style
50	67003-0000	Symmetric without grounding
	67003-0001	0.68 (0.027) without grounding
	67003-0006	Offset without grounding
	67003-0003	Symmetric with grounding
	67003-0007	

FEATURES AND SPECIFICATIONS

Features and Benefits

- Compatible with CompactFlash Association Standard (CFA)
- Adapts Type I CF Card to PC Card form factor
- Semi-circular notch on frame for easy removal of CF card
- Low mating/unmating force with CF card
- Polarization key prevents PC card mis-insertion

Reference Information

Product Specification: PS-67998-0004

Packaging: Tray

Designed In: Millimeters

Mechanical

Durability: 10,000 cycles

Physical

Housing: Black 4/6 nylon, UL 94V-0

Contact: Phosphor Bronze

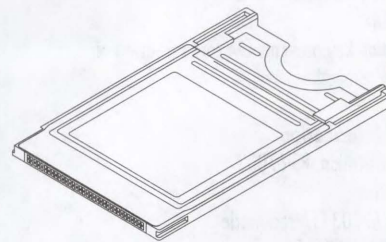
Metal Shell: Stainless Steel

Operating Temperature: -20 to +90°C

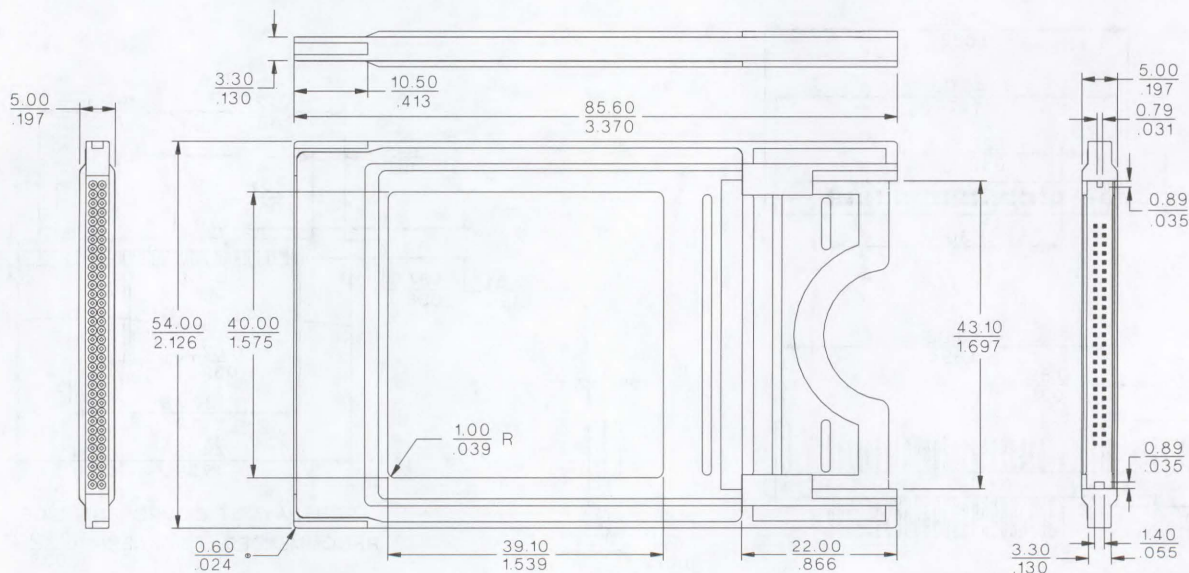


1.27mm (.050") Pitch CF Card To PC Card Adaptor

67038



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.	Description
67038-0000	CF Card to PC Card Adaptor

FEATURES AND SPECIFICATIONS

Features and Benefits

- Size 50 circuits
- Compatible with Compact Flash Association standard (CFA)
- Short guide rail for CFA card
- Low profile
- Polarization key prevents CFA card mis-insertion
- IR reflow compatible

Reference Information

Product Specification: PS-67003
 Packaging: Tray
 Mates With: 67003 CFA receptacle
 Use With: 67038 CF to PC card adaptor
 Designed In: Millimeters

Electrical

Voltage: 100V
 Current: 5.0A
 Contact Resistance: 40mΩ max.
 Dielectric Withstanding Voltage: 750V AC
 Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N min.
 Mating Force: 28.8N max.
 Unmating Force: 4.9N min.
 Durability: 10,000 cycles

Physical

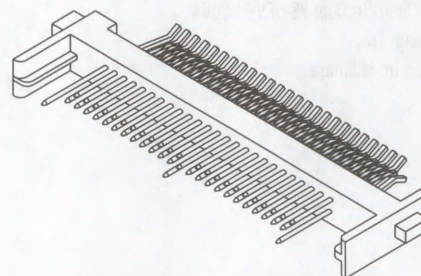
Housing: Black glass-filled LCP, UL 94V-0
 Contact: Phosphor Bronze
 Plating: Gold Flash over Palladium Nickel
 Operating Temperature: -20 to +90°C



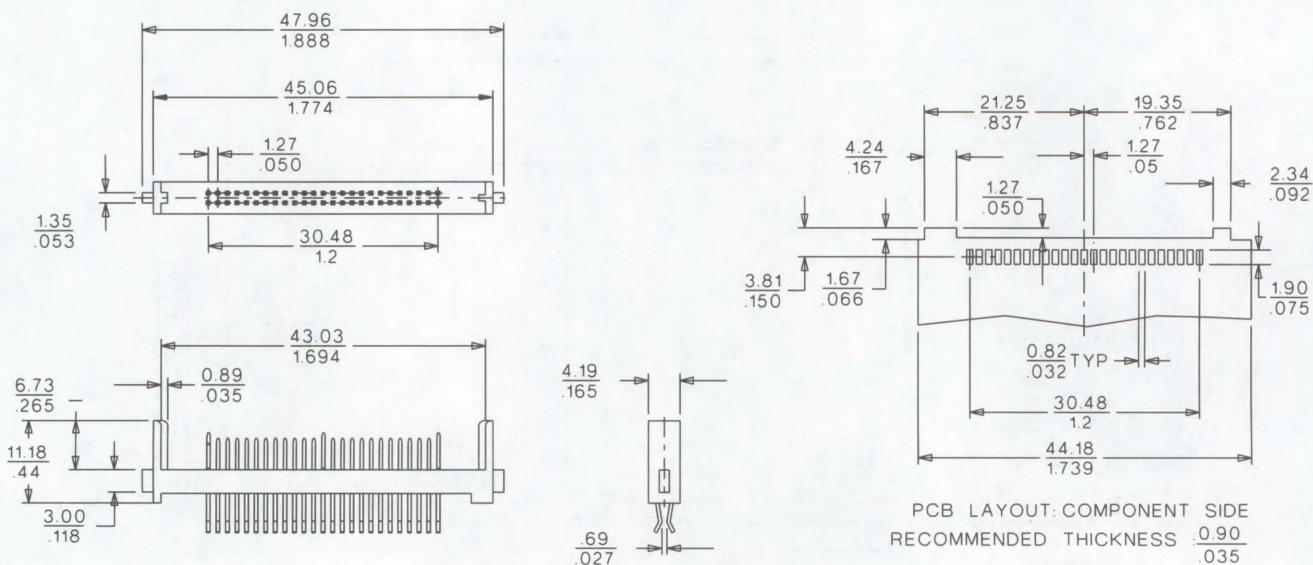
1.27mm (.050") Pitch
 CF Header

67005

Straddle Mount
 For CF to PC Card Adapter



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
50	67005-0001



PC Card Introduction

Molex's PC Card connector family offers industry standard compatibility and unique performance features for memory cards used in PC, consumer, telecom and other electronic industries.

Our growing lineup includes receptacles and headers that are compatible with PCMCIA and JEIDA standards for Type I, II and III card applications. We also offer a full range of card kits with frames and covers, along with value-added custom cable assemblies.

KEY FEATURES

PC Card 68-Circuit Headers

- Vertical or right angle mount
- Standard profile or raised version
- Top or bottom board mount options
- Through hole or SMT with in-line tails
- Accepts Type I, II and III cards
- Various eject mechanisms
- Phosphor Bronze pins
- Gold over Palladium Nickel plating
- 10,000 mating cycles
- Stacked header/ejector assemblies

PC Card I/O and Complete Card Kits

- Type I frame and covers (with or without adhesive tapes)
- Type II frame and covers (with or without adhesive tapes)
- 4, 15, 18 and 25-circuit SMT I/Os for Type II cards
- Shielded or nonshielded I/O options
- Covers with recess for labeling options
- Custom cable assemblies for land line and cellular line

PC Card 68-Circuit Receptacles

- High temperature insulator
- Single-side SMT or straddle mount
- Dual beam contacts
- 10,000 mating cycles
- Gold over Palladium Nickel plating
- Various offset tails

PC Card Dual Port Header and Ejector Assemblies

- SMT or through hole
- Various PC board profiles
- Top or bottom board mount options
- Accepts two Type I or II PC cards or one Type III card
- Various button orientation and styles
- Phosphor Bronze pins
- Gold over Palladium Nickel plating
- 10,000 mating cycles

CardBus Dual Port Header and Ejector Assemblies

- Accepts industry standard CardBus cards
- SMT, modular design
- Accepts two Type I or II cards or one Type III card
- Various PC board profiles
- Top or bottom board mount options
- Various button orientation and styles
- Phosphor Bronze pins
- Gold over Palladium Nickel plating
- 10,000 mating cycles

Memory Card Systems

M

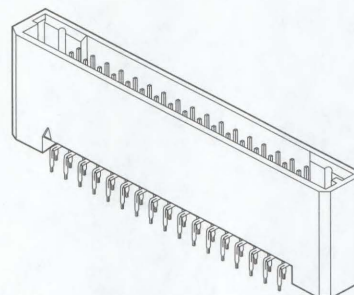
- Designed In: Millimeters

Housing: Black nylon 6/6, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area,
150µ" min. Tin/Lead on solder tails, 20µ" min. Nickel
underplate overall
Operating Temperature: -25 to +80°C



94208

Single Port, Flush Profile Vertical, Top Mount Through Hole



Technical drawing of a PCB layout showing top, side, and cross-section views with dimensions in inches and millimeters.

Top View:

- Overall length: 47.50 / 1.87
- Overall width: 1.27 / .05
- Left circular feature: 2.20 / .087 DIA
- Right circular feature: 0.65 / .025 DIA
- Distance between circular features: 1.27 / .05
- Distance from left edge to start of component area: 6.40 / .252
- Distance from right edge to end of component area: 1.27 / .05
- Labels: CIRCUIT 35, CIRCUIT 1

Side View:

- Overall height: 15.00 / .591
- Distance from top edge to component area: 1.905 / .075
- Distance from component area to bottom edge: 2.80 / .110
- Overall width: 57.40 / 2.260
- Label: SECTION Z - Z

Cross-section Z - Z:

- Shows the internal structure of the PCB, including the component area and the bottom edge.
- Labels: CIRCUIT 1, CIRCUIT 35

PCB LAYOUT: COMPONENT SIDE. RECOMMENDED PCB THICKNESS: 1.57 / .062

Circuits	Order No.	Board Mount
68	94208-0011	Vertical

Pin No.	Dimension L
36 and 67	3.50 (.138)
All other pins	4.25 (.167)
1, 17, 34, 35, 51 and 68	5.00 (.197)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Low voltage: 3.3V key
- Low Profile: 5.45mm (.215") height
- Single inline surface mount tails: 0.635mm (.025") pitch
- High temperature housing for IR process
- Top mounting version
- Accepts any PCMCIA Type I, II and III cards and any Type I or II cards with ejector mechanism

Reference Information

Product Specification: PS-67160-011

Packaging: Tray

Use With: 67121-0001 Ejector

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 40mΩ max.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N (2.205 lb) min.

Mating Force: 39.2N (8.82 lb) max.

Unmating Force: 6.67N (1.50 lb) min.

Durability: 10,000 cycles

Physical

Housing: White Glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

Plating: Contact Area — Gold over Palladium Nickel

Solder Tail Area — Tin/Lead

Underplating — Nickel

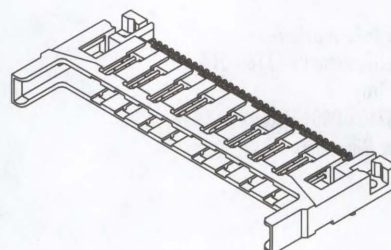
Operating Temperature: -20 to +85°C



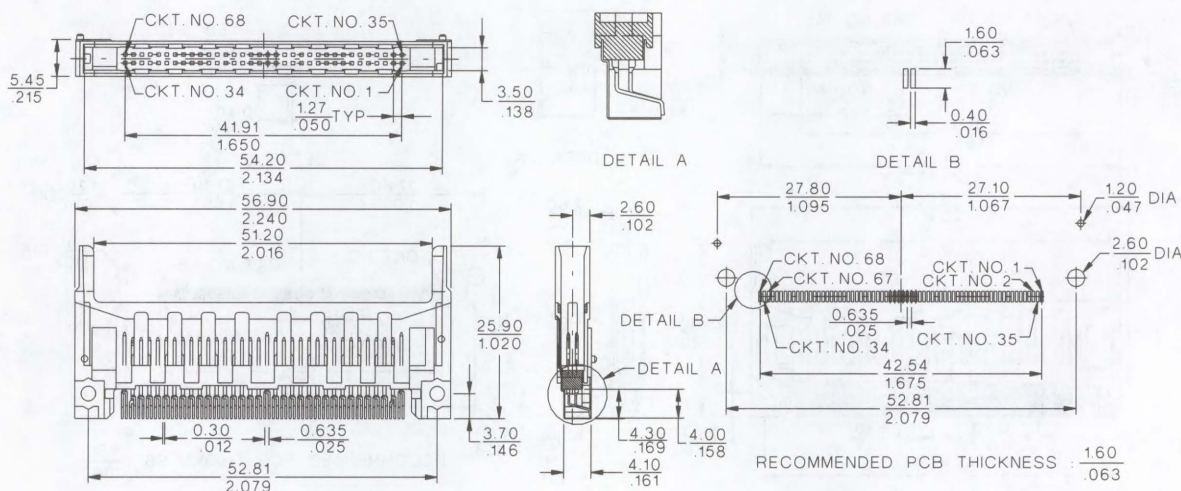
1.27mm (.050") Pitch PC Card Header

67130

**Single Slot, Flush Profile
Top Mount, Right Angle, SMT**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Voltage Key
68	67130-0002	3.3V Key

FEATURES AND SPECIFICATIONS

Features and Benefits

- Voltage: 5.0V key
- Low Profile: 5.45mm (.215") height
- Compatible with PCMCIA standard
- Single inline surface mount tails: 0.635mm (.025") pitch
- High temperature housing for IR process
- Reverse version
- Accepts any PCMCIA Type I, II and III cards and any Type I or II cards with ejector mechanism

Reference Information

Product Specification: PS-67160-011

Packaging: Tray

Use With: 67121-0001 Ejector

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 40mΩ max.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N (2.205 lb) min.

Mating Force: 39.2N (8.82 lb) max.

Unmating Force: 6.67N (1.50 lb) min.

Durability: 10,000 cycles

Physical

Housing: White Glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

Plating: Contact Area — Gold over Palladium Nickel

Solder Tail Area — Tin/Lead

Underplating — Nickel

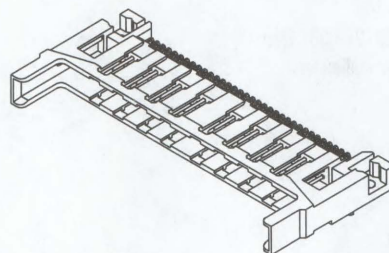
Operating Temperature: -20 to +85°C



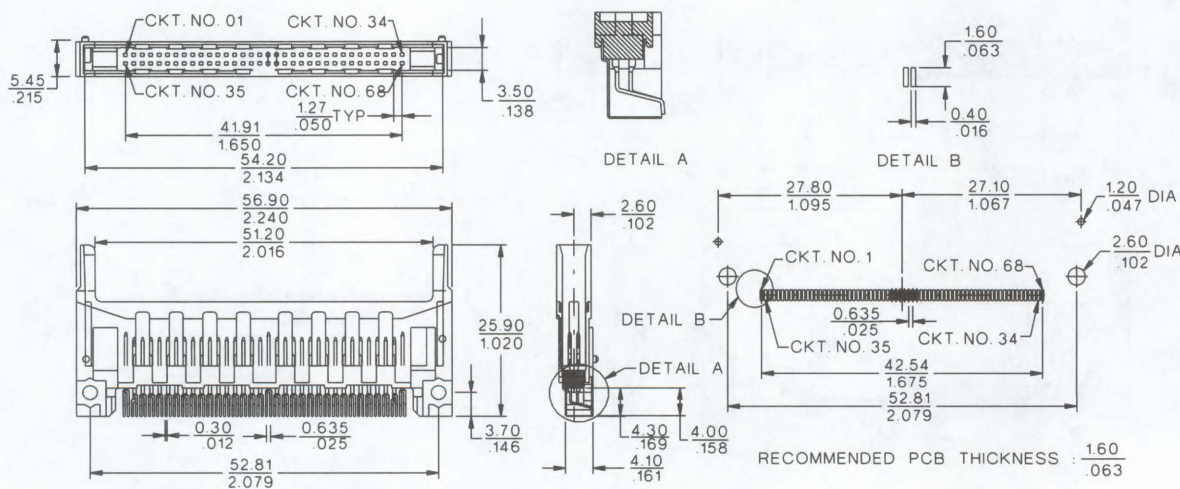
1.27mm (.050") Pitch PC Card Header

67130

Single Slot, Flush Profile Bottom Mount, Right Angle SMT



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Voltage Key
68	67130-0003	5.0V Key

FEATURES AND SPECIFICATIONS

Features and Benefits

- Compatible with PCMCIA and JEIDA standards
- A complete module for ease of assembly to main board
- 0.635mm 140 circuit board-to-board connector as mating receptacle
- Raised 1.9mm off the board
- Top mount with left-hand side ejectors
- Filter circuitry on daughterboard (assembly module)
- Accepts 2 Type I or 2 Type II cards, or 1 Type III card

Reference Information

Packaging: Tray
Mates With: 53485 plug (board-to-board)
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical

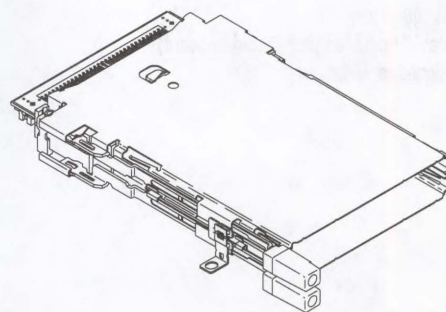
Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Operating Temperature: -20 to +90°C



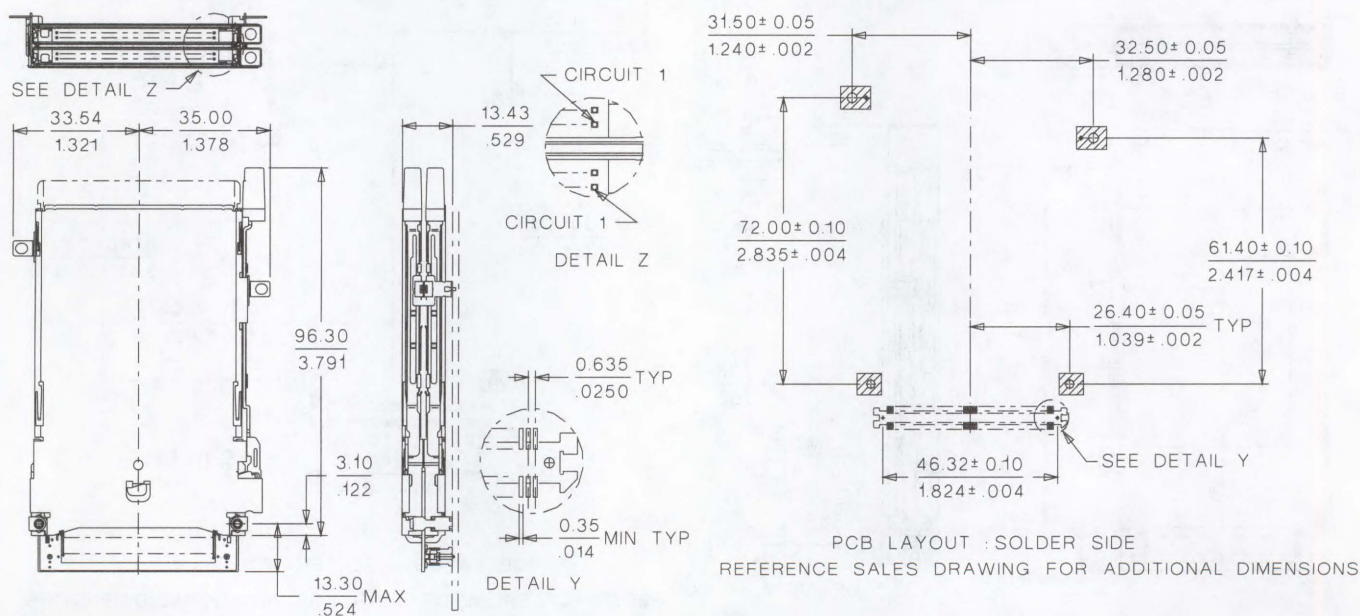
1.27mm (.050") Pitch PC Card Header and Ejector Assembly

53524

Dual Port, Raised Profile Right Angle, Top Mount SMT



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.	Board Mount
68 by 2	53524-1364	Top

FEATURES AND SPECIFICATIONS

Features and Benefits

- Compatible with PCMCIA and JEIDA standards
- A complete module for ease of assembly to main board
- 0.635mm 140 circuit board-to-board connector as mating receptacle
- Raised 1.98mm off the board
- Bottom mount with right-hand side ejectors
- Pushbutton can be flipped 90° to the side
- Filter circuitry on daughterboard
- Accepts 2 Type I or 2 Type II cards, or 1 Type III card

Reference Information

Packaging: Tray
Mates With: 53485 plug (board-to-board)
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical

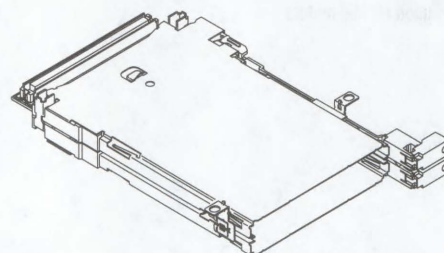
Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Operating Temperature: -20 to +90°C



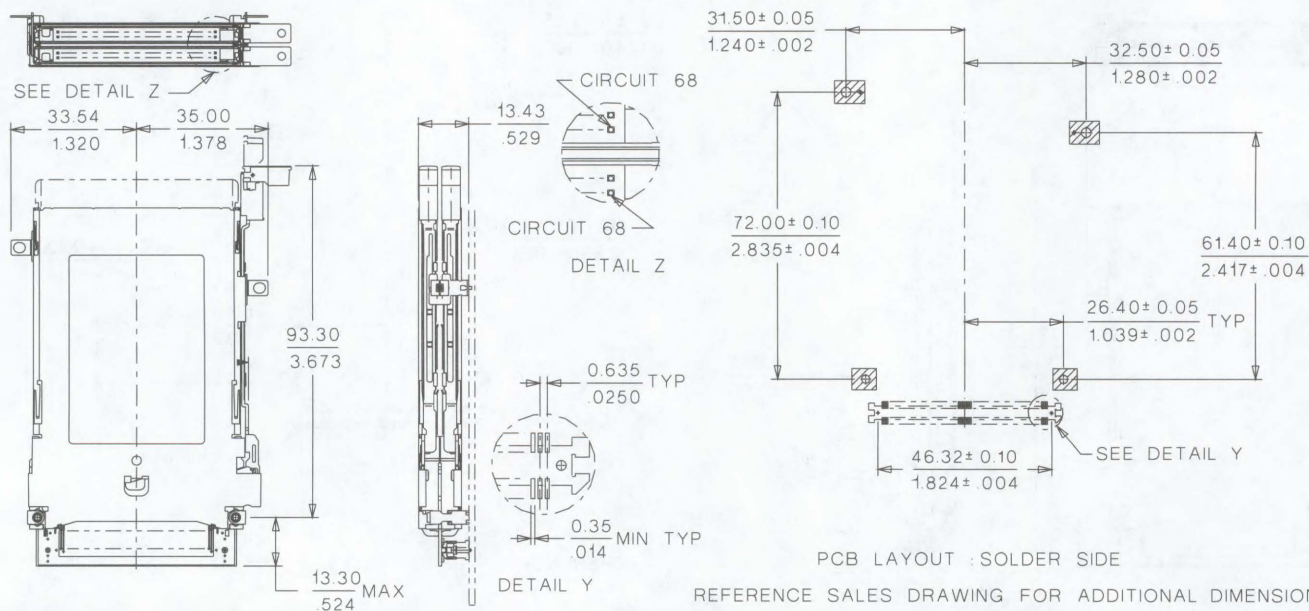
1.27mm (.050") Pitch PC Card Header and Ejector Assembly

53514

Dual Port, Raised Profile Right Angle, Bottom Mount SMT



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.	Board Mount
68 by 2	53514-1364	Bottom

FEATURES AND SPECIFICATIONS

Features and Benefits

- Low voltage: 3.3V key
- Low Profile: 5.45mm (.215") height
- Compatible with PCMCIA standard
- Single inline surface mount tails: 0.635mm (.025") pitch
- High temperature housing for IR process
- 8 grounding plates reinforce the ground bounce performance
- Top mounting version
- Accepts any PCMCIA Type I, II and III cards and Cardbus cards and any Type I or II cards with ejector mechanism

Reference Information

Product Specification: PS-67160-011

Packaging: Tray

Use With: 67121-0001, 67121-0003 or 67121-005 Ejector

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 40mΩ max.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N min.

Mating Force: 39.2N max.

Unmating Force: 6.67N min.

Durability: 10,000 cycles

Physical

Housing: White glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

Plating: Palladium Nickel with Gold Flash

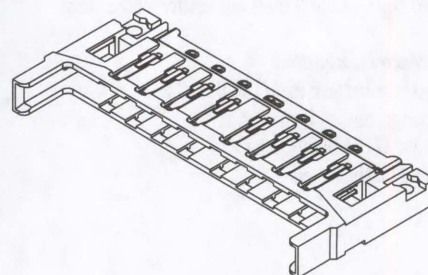
Operating Temperature: -20 to +60°C



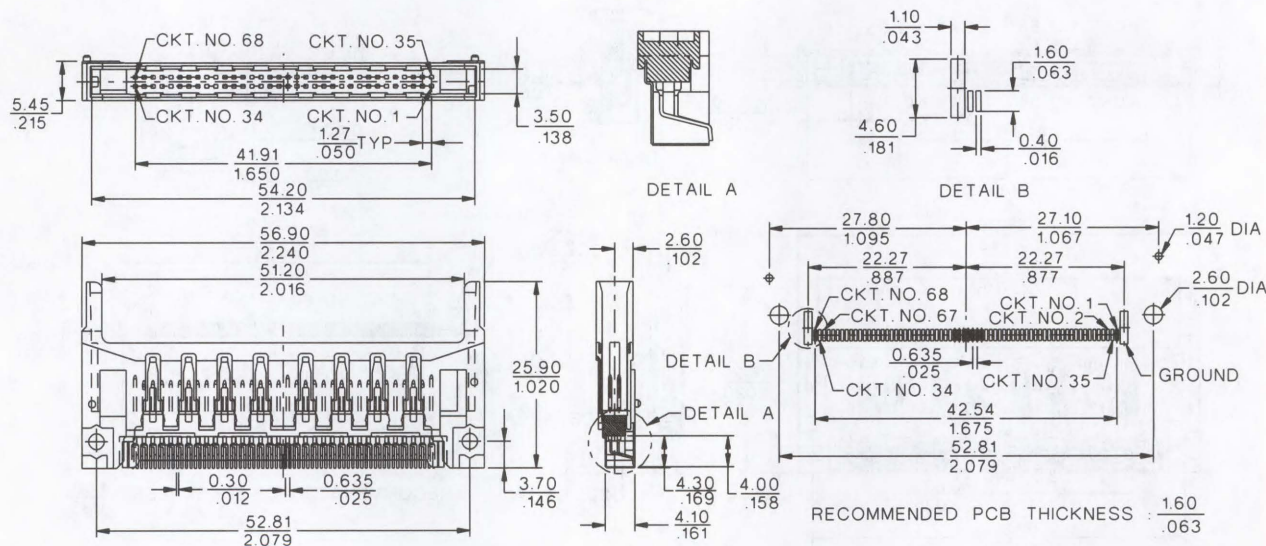
1.27mm (.050") Pitch One Slot Cardbus Header

67130

**Flush Profile, Top Mount
Right Angle, SMT**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.	Voltage Key
68	67130-0001	3.3V Key

FEATURES AND SPECIFICATIONS

Features and Benefits

- Voltage: 5.0V key
- Low-Profile: 5.45mm (.215") height
- Single inline surface mount tails: 0.635mm (.025") pitch
- High temperature housing for IR process
- 8 grounding plates reinforce the ground bounce performance
- Sink mounting version
- Accepts any PCMCIA Type I, II and III cards, Cardbus cards and any Type I or II cards with ejector mechanisms

Reference Information

Product Specification: PS-67160-011

Packaging: Tray

Use With: 67121-0006 Ejector

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 40mΩ max.

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N min.

Mating Force: 39.2N max.

Unmating Force: 6.67N min.

Durability: 10,000 cycles

Physical

Housing: White glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

Plating: Palladium Nickel with Gold Flash

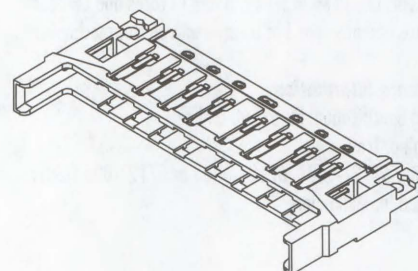
Operating Temperature: -20 to +60°C



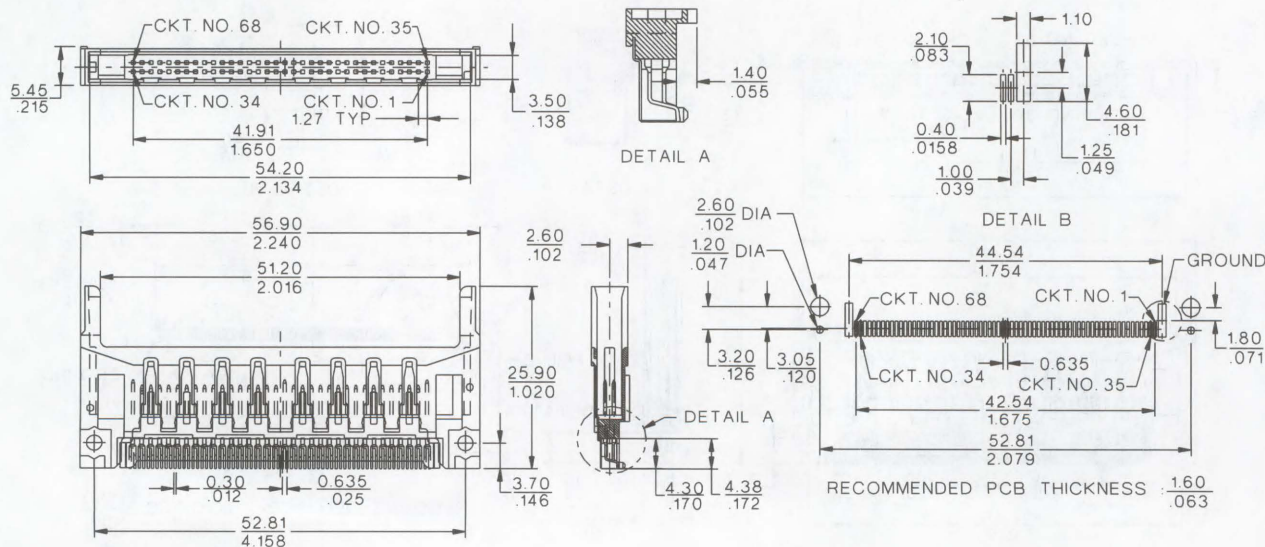
1.27mm (.050") Pitch One Slot Cardbus Header

67232

Flush Profile, Edge Mount Right Angle, SMT



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.	Voltage Key
68	67232-0001	5.0V Key



1.27mm (.050") Pitch
One Slot Cardbus Ejector

Features and Benefits

- Low Profile: 5.90mm (.232") height
- Compatible with PCMCIA standard
- Top or bottom mounting options
- Ejector fully shielded for EMI protection
- Pre-threaded brackets for easy assembly
- Accepts any PCMCIA Type I and II cards and Cardbus cards and any Type I or II cards with ejector mechanism

Mechanical

Durability: 10,000 cycles

Physical

Push Button: Black glass-filled PC, UL 94V-0

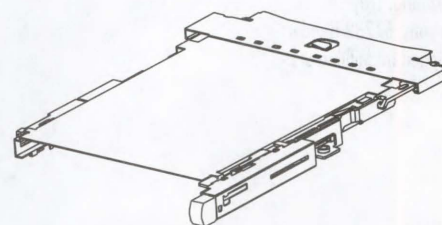
Ejector/Lever: Stainless Steel

Grounding Terminal: Phosphor Bronze and Gold plate

Operating Temperature: -20 to +60°C

67121

Flush Profile, Screw Mount Right Push Button



Reference Information

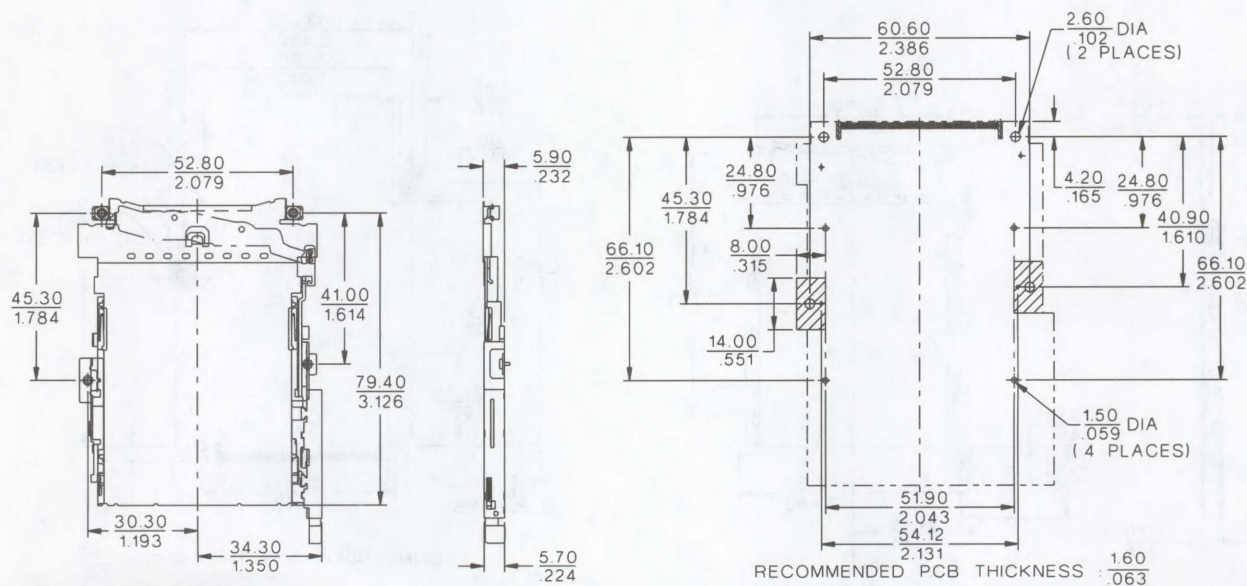
Product Specification: PS-67160-011

Packaging: Tray

Use With: 67130 Headers

Designed In: Millimeters

CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Order No.
67121-0001

FEATURES AND SPECIFICATIONS

Features and Benefits

- Low Profile: 5.90mm (.232") height
- Compatible with PCMCIA standard
- Sink mounting
- Ejector fully shielded for EMI protection
- Accepts any PCMCIA Type I, II cards and Cardbus cards

Reference Information

Product Specification: PS-67160-011

Packaging: Tray

Use With: 67232 Header

Designed In: Millimeters

Mechanical

Durability: 10,000 cycles

Physical

Push Button: Black glass-filled PC, UL 94V-0

Ejector/Lever: Stainless Steel

Grounding Terminal: Phosphor Bronze and Gold Plate

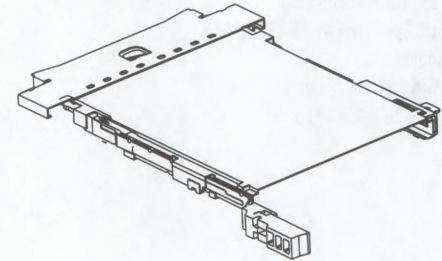
Operating Temperature: -20 to +60°C



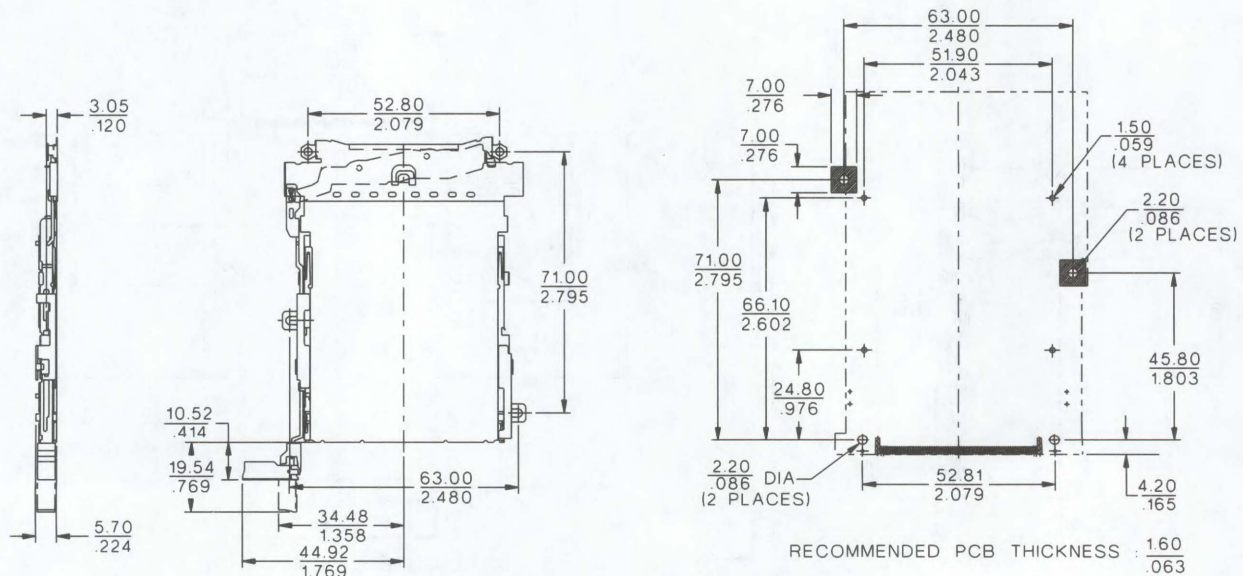
1.27mm (.050") Pitch One Slot Cardbus Ejector

67121

**Flush Profile, Screw Mount
Left Flip Button**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
68	67121-0006

FEATURES AND SPECIFICATIONS

Features and Benefits

- Accepts CardBus cards, multifunction cards and Type I, II and III PC cards
- Modular design for easy assembly
- Eight grounding pins reinforce ground bounce performance
- Eject assemblies fully shielded for EMI protection
- 0.635mm (.025") SMT board-to-board connector interface provides PCB space savings and compact design
- Front and rear brackets provide secure PCB retention and stand-off support

Reference Information

Packaging: Tray

Product specification: Contact Molex

Mates With: 52883 plug (board-to-board)

Contact Molex for ordering details

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 40mΩ max.

Dielectric Withstanding Voltage: 250V AC/1 min.

Insulation Resistance: 1000 MΩ min.

Physical

Housing: Glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

Plating: Gold over Palladium Nickel in contact area;

Tin/Lead in solder tail area, Nickel underplate overall

Metal Shell: Steel

Button: Gray glass-filled PBT, UL 94V-0

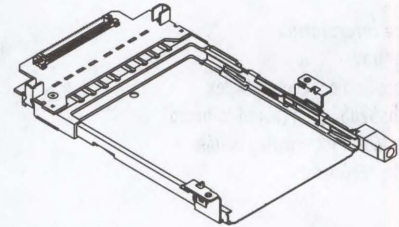
Operating Temperature: -20 to +85°C



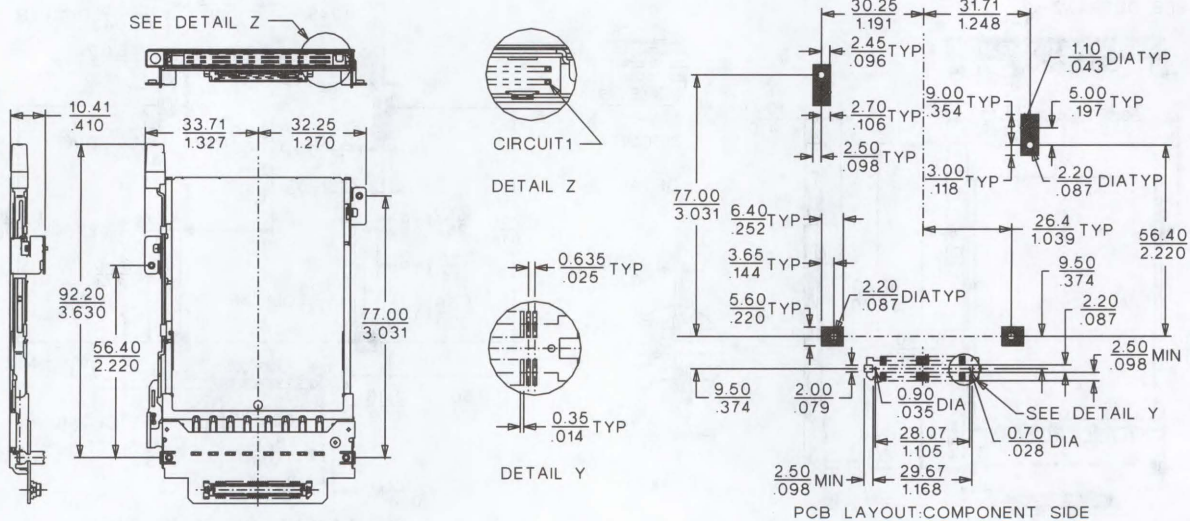
1.27mm (.050") Pitch One Slot CardBus Header and Ejector Assembly

55155

Reverse Mount, SMT Right Push Button



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
80	55155-0805

FEATURES AND SPECIFICATIONS

Features and Benefits

- Accepts CardBus cards, multifunction cards and Type I, II and III PC cards
- Modular design for easy assembly
- Eight grounding pins reinforce ground bounce performance
- Eject assemblies fully shielded for EMI protection
- 0.635mm (.025") SMT board-to-board connector interface provides PCB space savings and compact design
- Front and rear brackets provide secure PCB retention and stand-off support

Reference Information

Packaging: Tray
Product specification: Contact Molex
Mates With: 52883 plug (board-to-board)
Contact Molex for ordering details
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

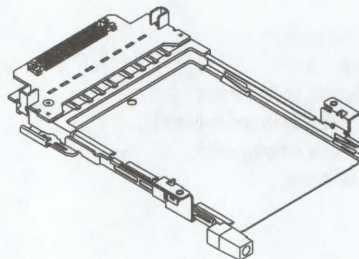
Housing: Glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel in contact area;
Tin/Lead in solder tail area, Nickel underplate overall
Metal Shell: Steel
Button: Grey glass-filled PBT, UL 94V-0
Operating Temperature: -20 to +85°C



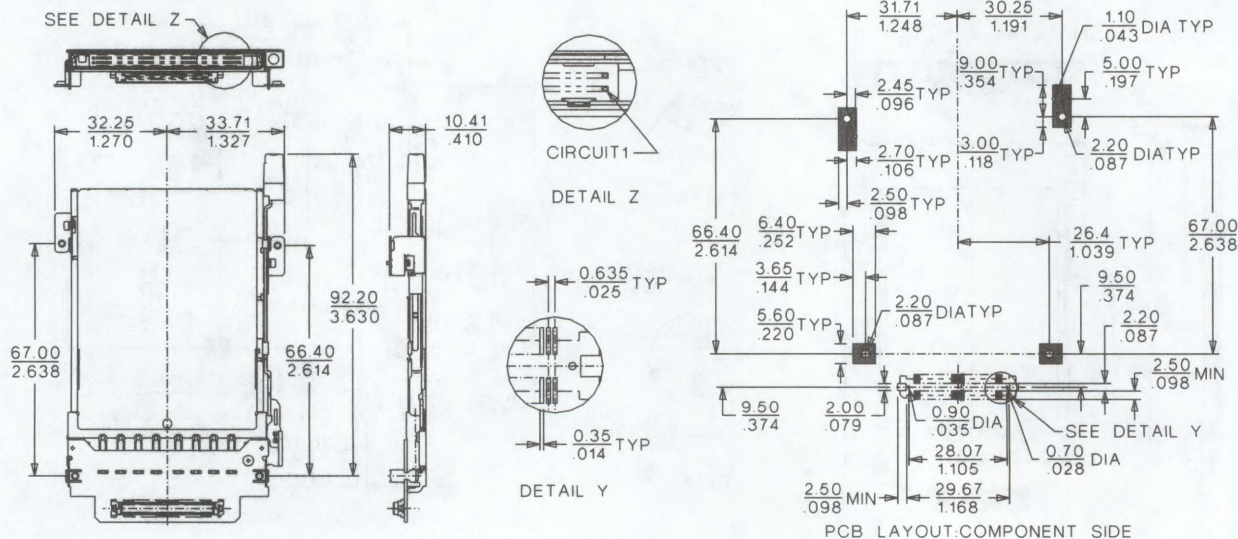
1.27mm (.050") Pitch One Slot CardBus Header and Ejector Assembly

55157

Reverse Mount, SMT Left Push Button



CATALOG DRAWING (FOR REFERENCE ONLY)

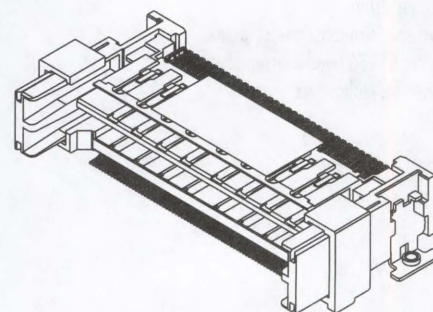


ORDERING INFORMATION

Circuits	Order No.
80	55157-0805

55186

Top Mount, SMT



- Accepts Carbus cards, multifunction cards and Type I, II and III PC cards
- High density one-piece design includes 0.635mm (.025") pitch dual-row in-line SMT tails for space savings and visible solder inspection
- Integrated grounding pins provide space savings and low "ground bounce" to protect against voltage drops
- Removable alignment guide helps maintain SMT tail co-planarity
- 2.00mm (.079") stand-off
- Capton tape for automatic placement

Packaging: Tray
Product specification: Contact Molex
Use With: 55170 ejector assembly
Designed In: Millimeters

Voltage: 100V
Current: 0.5A
Contact Resistance: 60mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Housing: Glass-filled LCP, UL 94V-0
Contact: Brass
Plating: Contact Area—Gold over Palladium Nickel and Nickel underplate
Solder Tail Area—Tin/Lead over Nickel
Screw Tab: Steel
Operating Temperature: -20 to +85°C

SEE DETAIL Z

54.20
2.134

42.545
1.675

3.175
.125 TYP

5.08
.200 TYP

2.59
.102

2.59
.102

12.83
.505

42.545
1.675

59.20
2.331

63.20
2.488

CIRCUIT1

CIRCUIT1

DETAIL Z

0.635
.025 TYP

0.42
.017 MINTYP

DETAIL Y

8.50
.335 TYP

6.60
.260 TYP

7.10
.280 TYP

3.60
.142 TYP

64.00
2.520

3.00
.118

2.70
.106 TYP

31.70
1.248

15.75
.620

1.34
.053

42.545
1.675

53.70
2.114

59.20
2.331

2.80
.110 TYP

2.10
.083 TYP

10.60
.417 TYP

SEE DETAIL Y

PCB LAYOUT: COMPONENT SIDE

Circuits	Order No.
144	55186-1440

FEATURES AND SPECIFICATIONS

Features and Benefits

- Compact one-piece design snaps easily into header
- Fully shielded for EMI protection
- Spring push-style button offers space savings and easy eject
- 2.00mm (.079") stand-off
- Stainless steel material provides durability and protection

Reference Information

Packaging: Tray
 Product specification: Contact Molex
 Use With: 55186 header assembly
 Designed In: Millimeters

Electrical

Voltage: 100V
 Current: 0.5A
 Contact Resistance: 60mΩ max.
 Dielectric Withstanding Voltage: 500V AC/1 min.
 Insulation Resistance: 1000 MΩ min.

Physical

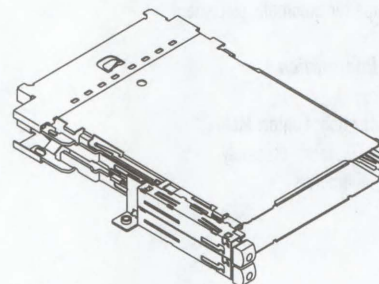
Metal Shell: Stainless Steel
 Button: Black polycarbonate, UL 94V-0
 Operating Temperature: -20 to +85°C



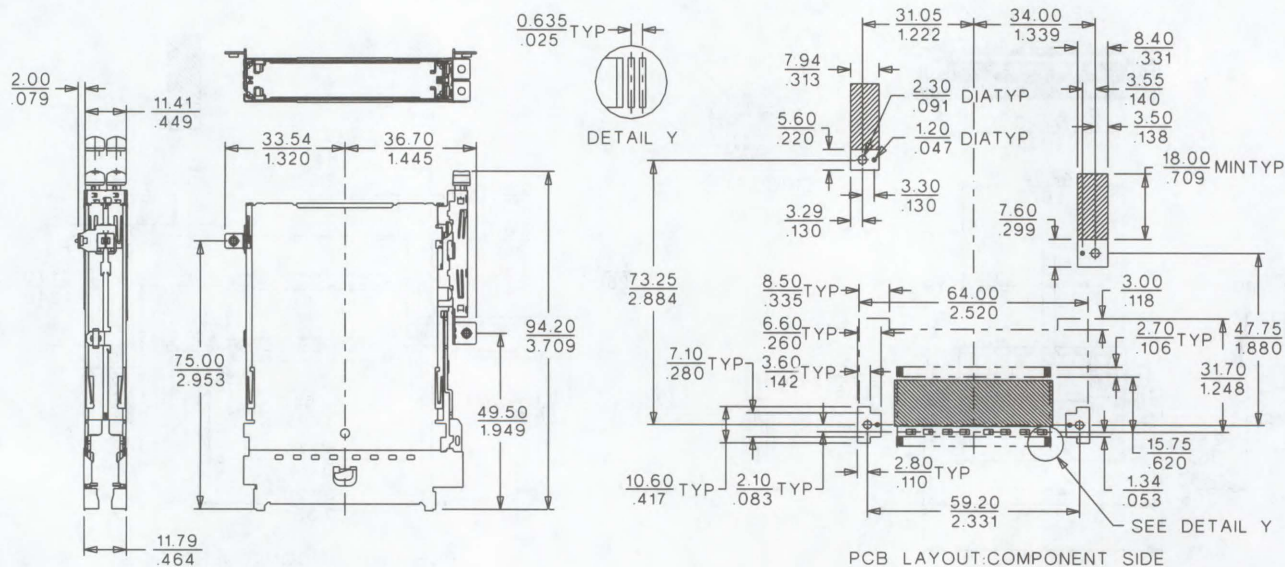
1.27mm (.050") Pitch Two Slot CardBus Ejector Assembly

55170

Top Mount Left Push Button



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
144	55170-0214

FEATURES AND SPECIFICATIONS

Features and Benefits

- Accepts CardBus cards, multifunction cards and Type I, II and III PC cards
- Spring pushstyle button offers space savings and easy eject
- Integrated grounding pins provide space savings and low "ground bounce" to protect against voltage drops
- Eject assemblies fully shielded for EMI protection
- 0.635mm SMT board-to-board connector interface provides PCB space savings and compact design
- 0.42mm standoff for low profile applications

Reference Information

Packaging: Tray

Mates With: 53467/53645 plug (board-to-board)

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: PC Card Connector—40mΩ max.

Board-to-Board Connector—40mΩ max.

Dielectric Withstanding Voltage: 250V AC/1 min.

Insulation Resistance: 1000 MΩ min.

Physical

Housing: Glass-filled LCP, UL 94V-0

Contact: Phosphor Bronze

Plating: Gold over Palladium Nickel in contact area;

Tin/Lead in solder tail area, Nickel underplate overall

Grounding Terminal: Phosphor Bronze, Gold over Nickel plating

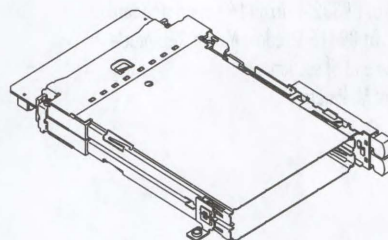
Operating Temperature: -20 to +85°C



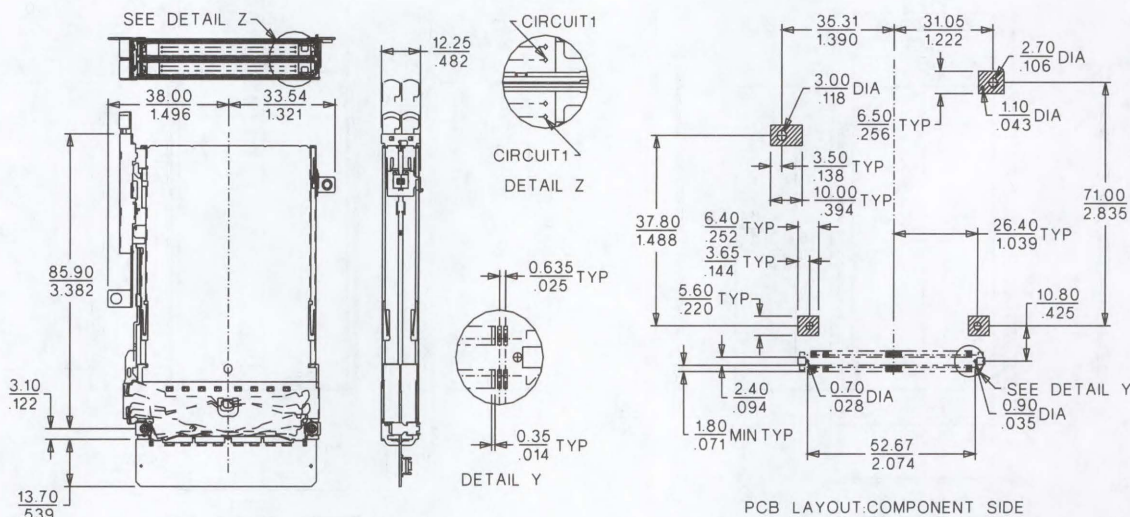
1.27mm (.050") Pitch CardBus Header and Ejector Assembly

55150

**Top Mount, SMT
Right Push Button**



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
80 by 2	55150-1605

Note: Contact Molex for custom combinations using flip or push button, top or bottom mounting, and various stand-off heights

FEATURES AND SPECIFICATIONS

Features and Benefits

- Offers complete component kit for assembly
- Frame with 2 grounding clips
- Cover with or without recess for labeling
- Cover with adhesive tapes pre-assembled
- Two different frames: SMT/Straddle Mount
- Semi automatic application tooling
67083/67084

Reference Information

Packaging (Cover/Frame): Tray

Used With: a) 89332 4 circuit I/O open standard

b) 89415 Straddle Mount Receptacle

Tooling: See end of section

Designed In: Millimeters

Physical

Frame: Black PBT, UL 94V-0

Grounding Clips: Phosphor Bronze

Plating: Gold over Nickel

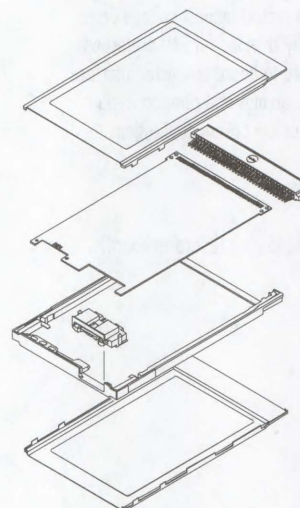
Cover: Stainless Steel

Adhesive Tape: Heat adhesive

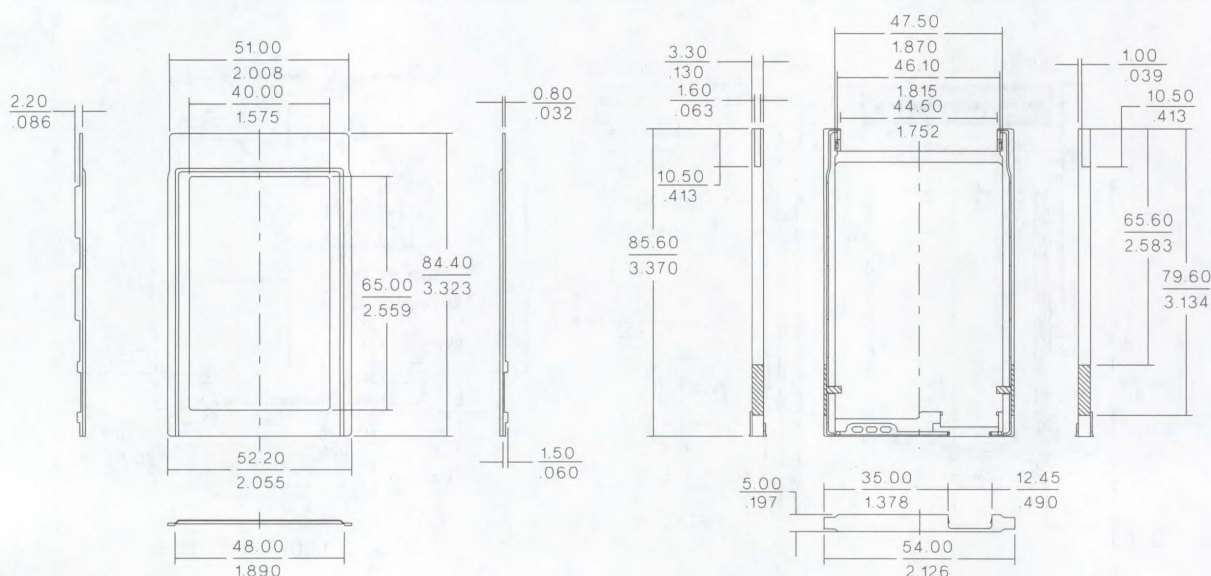


PC Card Type II Card Kit Straddle Mount

4 Circuit I/O



CATALOG DRAWING (FOR REFERENCE ONLY)



(Straddle Mount Frame Shown)

ORDERING INFORMATION

Components	
Order No.	Item
89434-0001	Straddle Mount Frame
89415-68X1	68 Circuit Straddle Mount Receptacle

Components	
Order No.	Item
89332-1002	4 Circuit I/O Header
89436-0000	Cover With Recess
89436-0010	Cover Without Recess

FEATURES AND SPECIFICATIONS

Features and Benefits

- Size 68 circuits
- Compatible with PC card and JEIDA standards
- Dual beam contact design
- Various offset tails

Reference Information

Product Specification: PS-89415

Packaging: Tube or tray

Mates With: PC card headers

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 40mΩ max.

Dielectric Withstanding Voltage: 500V AC

Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention To Housing: 4.9N min.

Mating Force: 39.2N max.

Unmating Force: 6.67N min.

Durability: 10,000 cycles

Physical

Housing: Black glass-filled LCP, UL 94V-0

Contact: Beryllium Copper Alloy

Plating: Palladium Nickel With Gold Flash

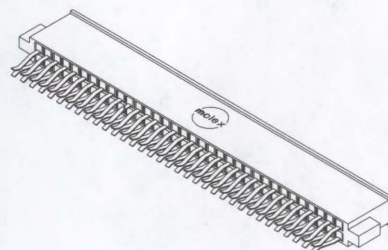
Operating Temperature: -20 to +90°C



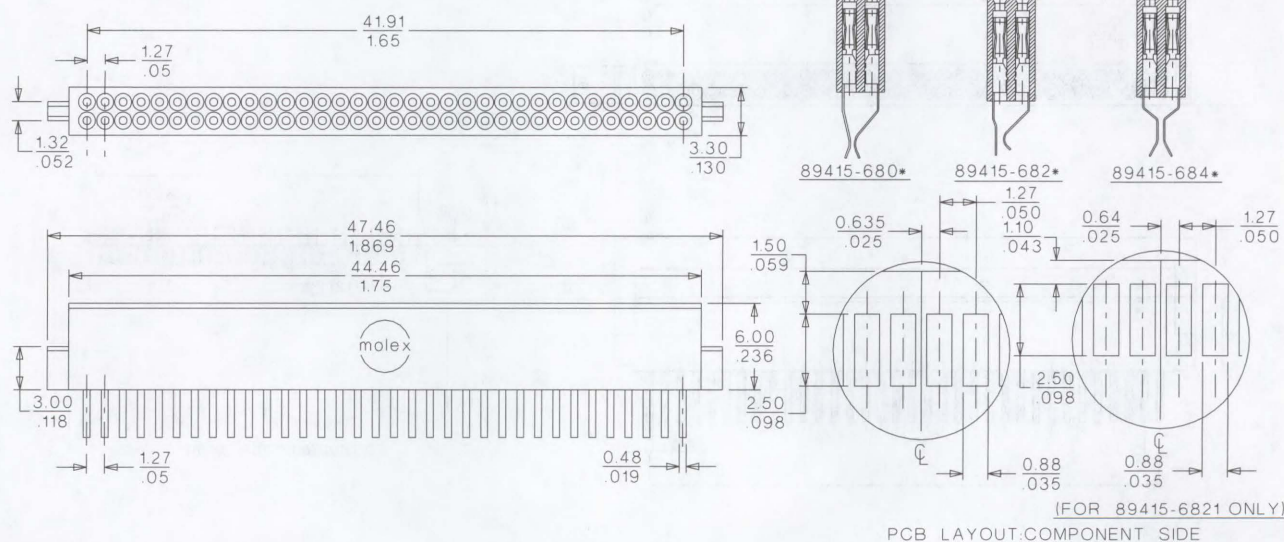
1.27mm (.050") Pitch PC Card Receptacle

89415

Straddle Mount, Standard and Offset Tail Versions



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.	Offset	Packaging
68	89415-6801	0.21 (.008)	Tube
	89415-6802	0.21 (.008)	Tray
	89415-6821	0.41 (.016)	Tube
	89415-6822	0.41 (.016)	Tray
	89415-6841	Symmetric	Tube
	89415-6842	Symmetric	Tray

FEATURES AND SPECIFICATIONS

Features and Benefits

- Compatible with PCMCIA and JEIDA standards
- Dual beam contact design
- Various offset tails

Reference Information

Packaging: Tube
 Mates With: PC card headers
 Designed In: Millimeters

Electrical

Voltage: 100V
 Current: 0.5A
 Contact Resistance: 40mΩ max.
 Dielectric Withstanding Voltage: 500V AC
 Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 4.9N min.
 Mating Force: 39.2N max.
 Unmating Force: 6.67N min.
 Durability: 10,000 cycles

Physical

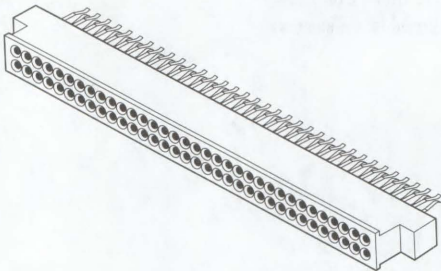
Housing: Black glass-filled LCP, UL 94V-0
 Contact: Beryllium Copper Alloy
 Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
 Operating Temperature: -20 to +90°C



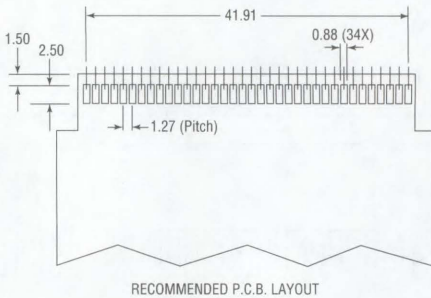
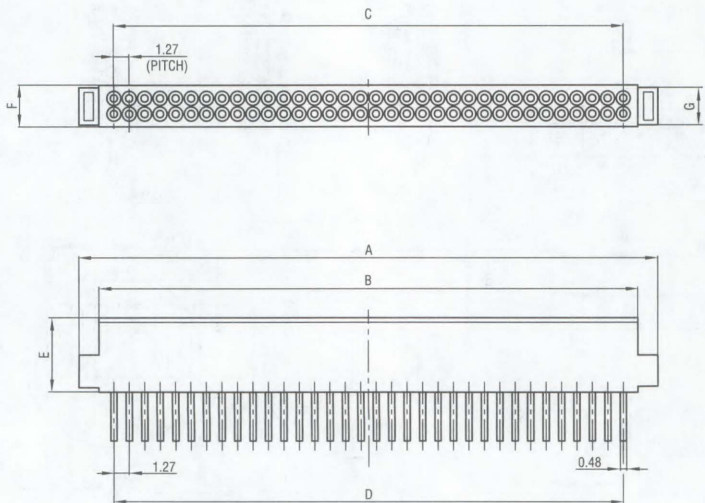
1.27mm (.050") Pitch
 PC Card Receptacle

89074

Straddle Mount, Standard and Offset Tail Versions

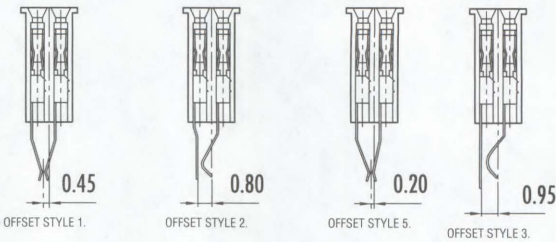


CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Offset Style	Dimension						
			A	B	C	D	E	F	G
68	89074-6801	1	47.46 (1.869)	44.46 (1.750)	41.91 (1.650)	41.91 (1.650)	6.60 (.260)	3.30 (.130)	2.70 (.106)
	89074-6821	2	47.46 (1.869)	44.46 (1.750)	41.91 (1.650)	41.91 (1.650)	6.60 (.260)	3.30 (.130)	2.70 (.106)
	89074-6831	3	47.46 (1.869)	44.46 (1.750)	41.91 (1.650)	41.91 (1.650)	6.60 (.260)	3.30 (.130)	2.70 (.106)
	89074-6851	5	47.46 (1.869)	44.46 (1.750)	41.91 (1.650)	41.91 (1.650)	6.60 (.260)	3.30 (.130)	2.70 (.106)



FEATURES AND SPECIFICATIONS

Features and Benefits

- Beveled spring contact design provides secure contact force and mating retention
- Metal shielding for ESD protection
- Push-push eject for easy card extraction
- Two off-set terminals allow first mate/ last break
- Polarization key prevents mismatching of card
- Curved design for easy card extraction

Reference Information

Product Specification: PS-54674-003

Packaging: Embossed

Use With: MultiMediaCards

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 80mΩ max.

Dielectric Withstanding Voltage: 500V AC/1 min.

Insulation Resistance: 1000 MΩ min.

Mechanical

Mating Force: 4.9N max.

Unmating Force: 4.9N max.

Durability: 10,000 cycles

Physical

Housing: Black LCP, UL 94V-0

Contact: Copper Alloy

Plating: Gold

Solder Tabs: Copper Alloy, Tin/Lead plating

Metal Cover: Stainless Steel

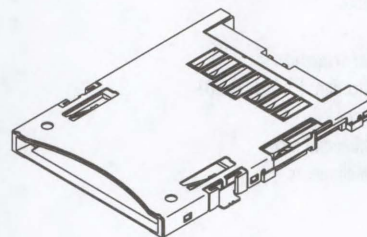
Operating Temperature: -25 to +85°C



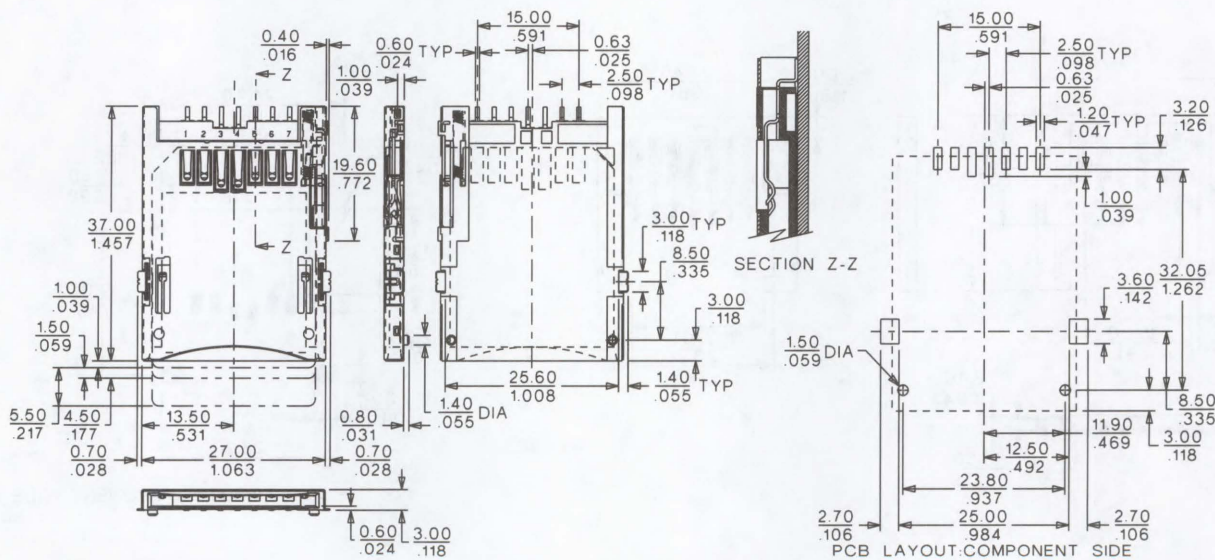
2.50mm (.098") Pitch MultiMediaCard Connector

54674

Shielded Type Right Angle, SMT



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Order No.
7	54674-0718

FEATURES AND SPECIFICATIONS

Features and Benefits

- Size 7 circuits
- Low profile of 2.40mm (.094") meets thin, portable equipment needs
- Beveled spring contact design provides secure contact force and mating retention
- Polarization key prevents mismatching
- Two offset terminals allow first mate/last break
- Inverted front solder tabs offer secure PCB retention and space-savings

Reference Information

Product Specification: PS-68156-001

Packaging: Tray

Use With: MultiMediaCards

Designed In: Millimeters

Electrical

Voltage: 100V

Current: 0.5A

Contact Resistance: 50mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 1000 MΩ min.

Mechanical

Mating Force: 4.0N (0.9 lb) max.

Unmating Force: 1.0N (0.2 lb) min.

Durability: Over 10,000 cycles

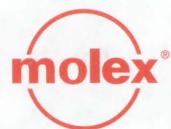
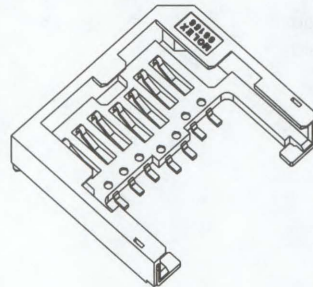
Physical

Housing: Natural glass-filled LCP, UL 94V-0

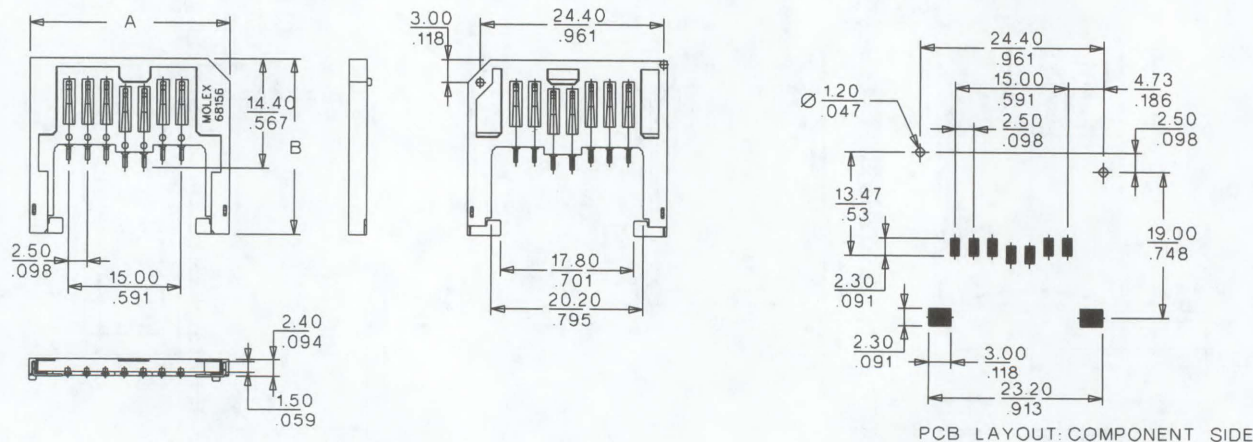
Contact: Phosphor Bronze

Plating: Gold

Operating Temperature: -25 to +90°C


**2.50mm (.098") Pitch
MultiMediaCard Connector**
68156
**Low Profile
Right Angle, SMT
Reverse Mount**


CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
7	68156-0720	26.60 (1.047)	23.00 (.906)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Switch component integral to the connector module
- Long contact beams
- Low normal force
- Top or bottom mounting
- Insert molded

Reference Information

Product Specification: PS-94300-005

Packaging: Tray

Designed In: Millimeters

Electrical

Voltage: 5V

Current: Contact—1.0A max.

Switch—0.1A max.

Contact Resistance: 100mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 5000 MΩ min.

Mechanical

Normal Force: 0.25 to 0.50N

Durability: 100,000 cycles

Physical

Housing: Black glass-filled PA 4.6, UL 94V-0

Contact: Phosphor Bronze

Plating: Gold over Palladium Nickel

Operating Temperature: -40 to +85°C

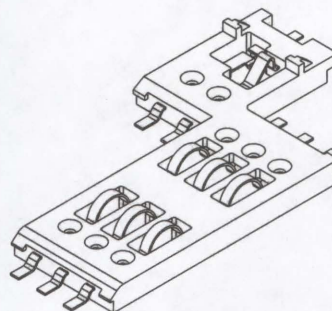


2.54mm (.100") Pitch Smart Card Reader Connector

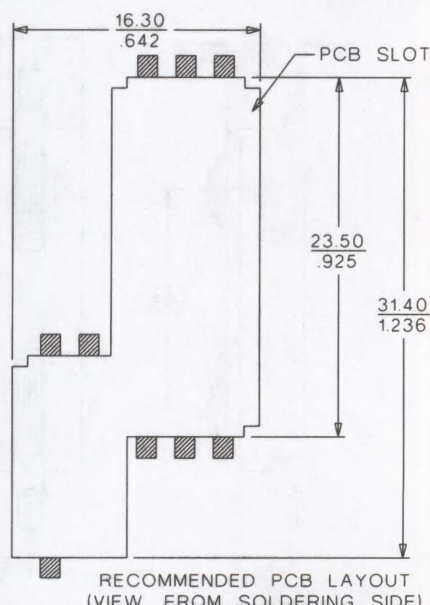
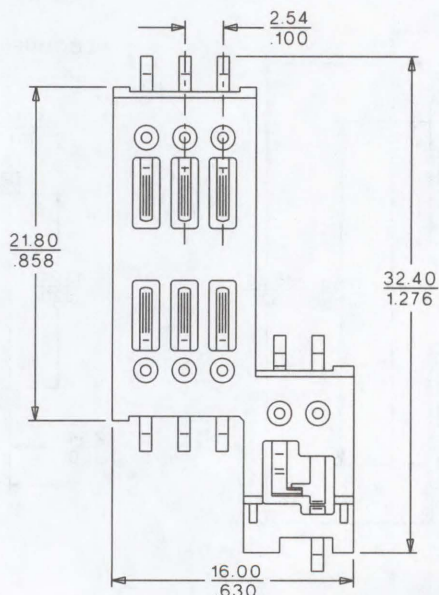
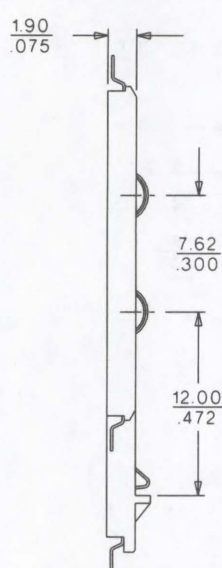
94301

6 Circuit

**SMT PCB Slot Mounting
With Switch Normally Open**



CATALOG DRAWING (FOR REFERENCE ONLY)



RECOMMENDED PCB LAYOUT
(VIEW FROM SOLDERING SIDE)

ORDERING INFORMATION

Circuits	Order No.
6	94301-1006

FEATURES AND SPECIFICATIONS

Features and Benefits

- SMT lead configuration for PCB top surface mounting
- Coplanarity of solder tails—0.10mm
- Large "pick and place" area for robotic handling

Reference Information

Product Specification: PS-94303-005

Packaging: See Table

Designed In: Millimeters

Electrical

Voltage: 5V

Current: Contact—0.5A max.

Switch—0.1A max.

Contact Resistance: 100mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 5000 MΩ min.

Mechanical

Normal Force: 0.25 to 0.50N

Durability: 10,000 cycles

Physical

Housing: Black glass-filled PA 4.6, UL 94V-0

Contact: Phosphor Bronze

Plating: Gold over Palladium Nickel

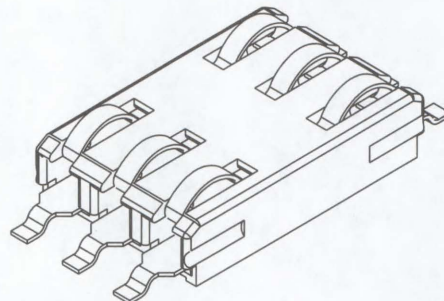
Operating Temperature: -40 to +85°C



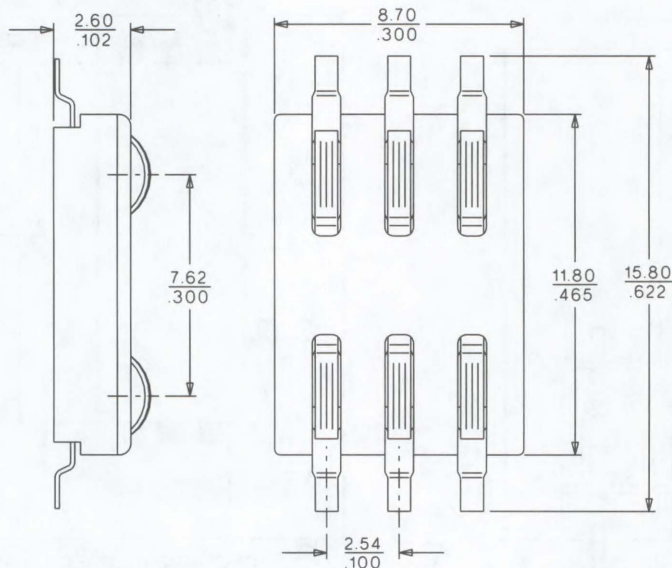
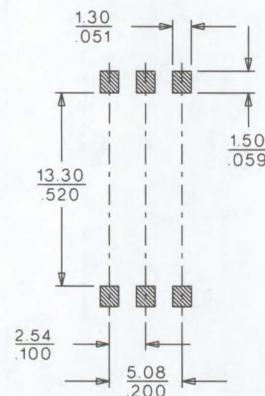
2.54mm (.100") Pitch SIM Card Reader Connector Minicompact

94303

6 Circuit SMT PCB Top Mounting



CATALOG DRAWING (FOR REFERENCE ONLY)

RECOMMENDED PCB LAYOUT
SCALE 2:1

ORDERING INFORMATION

Circuits	Order No.	Packaging
6	94303-0006	Tube
	94303-5006	Tape and Reel

FEATURES AND SPECIFICATIONS

Features and Benefits

- Electrical connection between SIM card and mobile phone
- No PCB slot needed
- SMT lead configuration
- PCB top mounting
- Low cycle version available

Reference Information

Product Specification: PS-94314-009

Packaging: Tape and reel

Mates With: SIM card ISO 7816-2 or GSM card 11.11

Designed In: Millimeters

Electrical

Voltage: 5V

Current: 10.0mA

Contact Resistance: 30mΩ max.

Dielectric Withstanding Voltage: 1000V

Insulation Resistance: 5000 MΩ min.

Mechanical

Contact Retention Force: 1N (0.22 lb) min.

Solder Force to PCB: 9.8N (2.20 lb) min.

Normal Force: 0.5N (0.11 lb) max.

Durability: See Table

Physical

Housing: Black LCP, UL 94V-0

Contact: Phosphor Bronze Copper Tin

Plating: Contact Area—See Table

Solder Tail Area—Tin/Lead

Underplating—Nickel

Coplanarity: 0.10mm (.004")

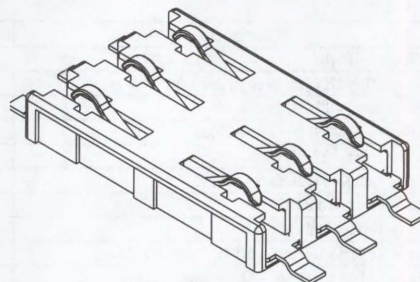
Operating Temperature: -40 to +85°C



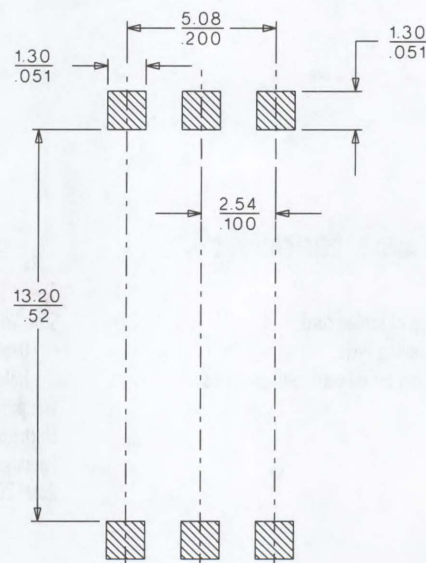
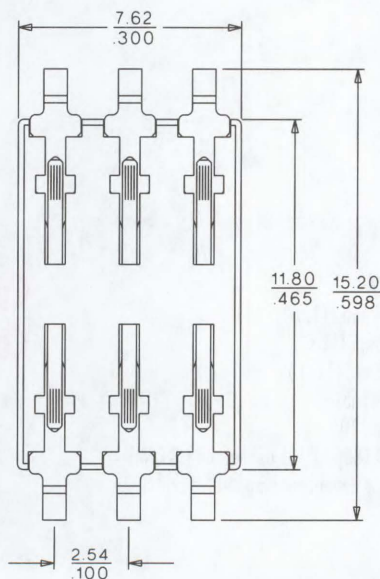
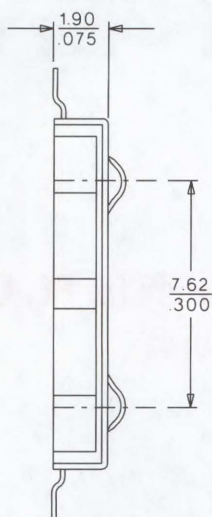
2.54mm (.100") Pitch Compact SIM Card Reader Connector

94314

**6 Circuit
Low Profile**



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: SOLDER SIDE

ORDERING INFORMATION AND DIMENSIONS

Order No.	Housing Height	Durability	Contact Area Plating
94314-5006	1.20 (.047)	10,000 cycles max.	Gold over Palladium Nickel
94314-5906	1.90 (.075)	10,000 cycles max.	Gold over Palladium Nickel
94314-5916	1.90 (.075)	3,000 cycles max.	Gold

FEATURES AND SPECIFICATIONS

Features

- Tooling holds all card kit parts in alignment for sealing
- Automatic control of temperature and dwell time for optimal sealing
- Change tooling for all card configurations

Specifications

Size: Width—279mm (11.0")
 Depth—279mm (11.0")
 Height—472mm (18.6")
 Weight: 18.6kg (41 lb)
 Electrical: 110V AC, 10A
 Pneumatic: 3 BAR (80psig), 6L per second (.2 CFM)
 Rate: 180 sealed cards per hour dependent on operator skill

molex® Application Tooling

Sealing Fixture for PC, CF and CardBus Cards



ORDERING INFORMATION

Description	Order No.
Sealing Fixture Only 110V	67083-1001
Sealing Fixture Only 220V (European Version Only)	67083-1002
Upper Die for Frame—89434, Cover—89436	67084-0111
Lower Die for Frame—89434, Cover—89436	67084-0112
Upper Die for Frame—89201, Cover—89248	67084-0211
Lower Die for Frame—89201, Cover—89248	67084-0212
Upper Die for CardBus Card Kit	67084-0311
Lower Die for CardBus Card Kit	67084-0312
Upper Die for CF Card Kits Frame—67045, Cover—67046	67084-0411
Lower Die for CF Card Kits Frame—67045, Cover—67046	67084-0412

FEATURES AND SPECIFICATIONS

Features

- Quick cooling of sealed cards
- Automatic cooling cycle
- Change tooling for all card configurations

Specifications

Size: Width—279mm (11.0")
 Depth—279mm (11.0")
 Height—432mm (17.0")
 Weight: 18.6kg (41 lb)
 Electrical: 110V AC, 10A
 Pneumatic: 3 BAR (80psig), 8L per second (.3 CFM)
 Rate: 200 per hour dependent on operator skill

Cooling Fixture for PC, CF and CardBus Cards



ORDERING INFORMATION

Description	Order No.
Cooling Fixture Only 110V	67083-2001
Cooling Fixture Only 220V (European Version Only)	67083-2002
Upper Die for Frame—89434, Cover—89436	67084-0121
Lower Die for Frame—89434, Cover—89436	67084-0122
Upper Die for Frame—89201, Cover—89248	67084-0221
Lower Die for Frame—89201, Cover—89248	67084-0222
Upper Die for CardBus Card Kit	67084-0321
Lower Die for CardBus Card Kit	67084-0322
Upper Die for CF Card Kits Frame—67045, Cover—67046	67084-0421
Lower Die for CF Card Kits Frame—67045, Cover—67046	67084-0422

FEATURES AND SPECIFICATIONS

Features

- Used for repair or rework
- Process assists in removing card covers
- Change tooling for all card configurations

Specifications

Size: Width—305mm (12.0")
 Depth—269mm (10.6")
 Height—610mm (24.0")
 Weight: 18.2kg (40 lb)
 Electrical: 110V AC, 10A
 Pneumatic: 3 BAR (80psig), 6L per second (.2 CFM)

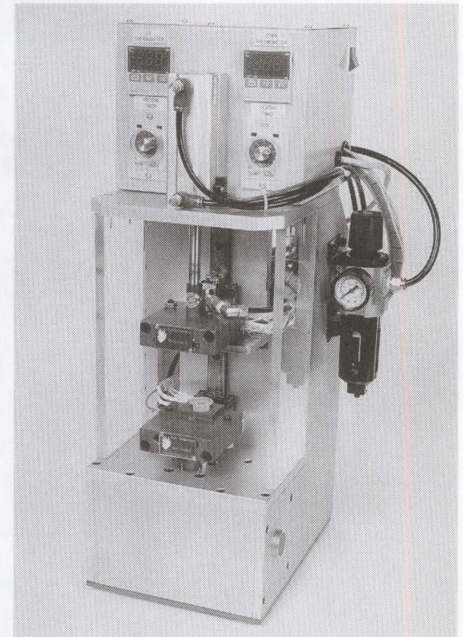
ORDERING INFORMATION

Description	Order No.
Separating Fixture Only 110V	67083-3001
Separating Fixture Only 220V (European Version Only)	67083-3002
Upper Die for Frame—89434, Cover—89436	67084-0131
Lower Die for Frame—89434, Cover—89436	67084-0132
Upper Die for Frame—89201, Cover—89248	67084-0231
Lower Die for Frame—89201, Cover—89248	67084-0232
Upper Die for CardBus Card Kit	67084-0331
Lower Die for CardBus Card Kit	67084-0332
Upper Die for CF Card Kits Frame—67045, Cover—67046	67084-0431
Lower Die for CF Card Kits Frame—67045, Cover—67046	67084-0432



Application Tooling

Separating Fixture for PC, CF and CardBus Cards



Memory Card Systems

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FEATURES AND SPECIFICATIONS

Features

- Closes cover and crimps in 1 operation
- Adjustable closing force
- Audible "click" indicates cycle completion
- Card cover crimping nest slides out of press for easy loading

Specifications

Size: Width—150mm (6")
 Depth—330mm (13")
 Height—450mm (18")
 Weight: 15kg (33 lb)
 Rate: Up to 100 assemblies per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.	Product
Manual Press for Memory Card Cover	62200-1400	71139

Memory Card Manual Press For Cover 71139

